ANNUAL REPORT

(JANUARY, 2023 - DECEMBER, 2023)

Submitted At

Annual Zonal Workshop for Krishi Vigyan Kendras (KVKs) of the States of Odisha and West Bengal and Union Territory of Andaman & Nicobar Islands under ICAR - Agricultural Technology Application Research Institute (ATARI), Zone – V, Kolkata

Organized y
ICAR-ATARI, Kolkata & OUAT – KVK, Puri

at
OUAT-KVK, Puri, Odisha

Submitted By

Rathindra Krishi Vigyan Kendra
Palli Siksha Bhavana
(Institute of Agriculture)
Visva-Bharati
Sriniketan, Birbhum, West Bengal- 731236

27th – 29th August, 2024

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ANNUAL REPORT 2023 (January-December 2023)

1. GENERAL INFORMATION ABOUT THE KVK

1.1. Name and Address of KVK with Phone Number, Fax Number and E-Mail Address

Address	Telephone Number		E-Mail
Rathindra Krishi Vigyan Kendra Palli Siksha Bhavana (Institute of Agriculture) Visva-Bharati, Sriniketan, P. O. – Sriniketan, Dist. – Birbhum, Pin. – 731236, West Bengal, India	Office 03463-264771	FAX -	rathindrakvk@gmail.com rathindrakvk@rediffmail.com rkvk@visva-bharati.ac.in

1.2. Name and Address of Host Organization with Phone Number, Fax Number and E-Mail

Address	Telephone Number		E-Mail
	Office	FAX	
Visva-Bharati, Santiniketan, P. O. – Santiniketan, Dist. – Birbhum, Pin. – 731235, West Bengal, India.	03463 - 262-751 to 262-756 (6 lines)	03463-262-672	Vice-Chancellor: vice-chancellor@visva-bharati.ac.in Registrar: registrar@visva-bharati.ac.in Principal, Palli Siksha Bhavana (Institute of Agriculture) and In-Charge Rathindra KVK: principal.psb@visva-Bharati.ac.in

1.3. Name of Senior Scientist and Head with phone & mobile No.

Name	Telephone / Contact		
	Residence	Mobile	Email
Dr. Subrata Mandal	-	9434431350 9083621181	smkvkvb@gmail.com

1.4. Year of sanction: F.2 (2) \ 93-AE-1 on 4thOctober, 1994. Actual month of start: April, 1995 (Reference of Sanction Order)

1.5. Staff Position (as on 1st January, 2023)

Sl. No.	Sanctioned post	Name of the incumbent	Designation	Discipline	Pay Scale with present basic	Date of joining	Permanent /Temporary	Category (SC/ST/OBC/ Others)
01.	Senior Scientist & Head	Dr. Subrata Mandal	Senior Scientist and Head	Agronomy	Pay Level -13 A Basic: Rs 1,56,900/-	08.10.2021	Permanent	GC
02.	Subject Matter Specialist	Sri Sourav Mondal	Subject Matter Specialist	Plant Protection	Pay Level -13 A Basic: Rs 1,52,300/-	01.08.2004	Permanent	SC
03.	Subject Matter Specialist	Dr. Prabuddha Ray	Subject Matter Specialist	Agricultural Extension	Pay Level-10 Basic: Rs. 73,200/-	19.06.2012	Permanent	GC
04.	Subject Matter Specialist	Dr. Madhuchhanda Khan	Subject Matter Specialist	Animal Science	Pay Level-11 Basic: Rs. 80,900/- NPA 20%	10.06.2014	Permanent	GC
05.	Programme Assistant	Sri Suraj Kumar Bhakta	Programme Assistant (Computer Programmer)	-	Pay Level-6 Basic: Rs.44,900/-	16.06.2014	Permanent	OBC
06.	Programme Assistant	Sri Palash Ankure	Programme Assistant (Farm Manager)	-	Pay Level-7 Basic: Rs.49,000/-	18.09.2014	Permanent	SC
07.	Driver	Sri Bikash Chandra Ghosh	Driver-cum-Mechanic	-	Pay Level-7 Basic: Rs.56,900/-	06.05.1997	Permanent	GC
08.	Supporting staff	Sri Naran Tudu	Supporting Staff	-	Pay Level-1 Basic: Rs.24,200/-	05.06.2014	Permanent	ST

Note: At present, 8 posts (Subject Matter Specialist-3, Programme Assistant-1, Assistant-1, Stenographer-1, Supporting Staff-1, Driver-1) are vacant among the total sanctioned post 16.

DAMU staff

Sl. No.	Sanctioned post	Name of the incumbent	Designation	Discipline	Pay Scale with present basic	Date of joining	Permanent /Temporary	Category (SC/ST/OBC/ Others)
01.	Subject Matter Specialist	Sri Sayak Mahato	Subject Matter Specialist	Agro Meteorology	Pay Level -10 Basic: Rs 59,500/-	13.08.2020	Temporary	GC
02.	Agromet Observer	Sri Swapan Bauri	Agromet Observer	-	Pay Level -3 Basic: Rs 23,100/-	03.08.2020	Temporary	SC

1.6. Total land with KVK (in ha)

Sl. No.	Item	Area (ha)
1.	**Under Buildings**	00.550
2.	**Under Demonstration Units**	00.002
3.	**Under Crops for Demonstration**	02.000
4.	**Orchard/Agro-forestry**	01.000
5.	**Under Seed Production**	04.000
6.	**Stocking and Rearing Pond**	01.000
7.	**Nursery Pond**	00.013
8.	**Under Fallow and farm roads**	07.080
6.	**Total**	**15.645**

1.7. Infrastructure Development:

A) Buildings and others

Sl. No.	Name of infrastructure	Not yet started	Completed up to plinth level	Completed up to lintel level	Completed up to roof level	Totally completed	Plinth area (sq.m)	Under use or not*	Source of funding
1.	Administrative Building					Totally completed	550.00	Under use	ICAR
2.	Trainees' Hostel					Totally completed	305.00	Under use	ICAR
3.	Staff Quarters (6)	-							
4.	Piggery unit	-							
5	Fencing	-							
6	Rainwater harvesting structure	-							
7	Threshing floor					Totally completed	180.00	Under use	ICAR
8	Farm go-down					Totally completed	46.25	Under use	ICAR
9.	Dairy unit	-							
10.	Poultry unit					Totally completed	80.00	Under use	ICAR
11.	Goatery unit	-				Not fully completed	30.00	Under use	ICAR
12.	Mushroom Lab					Totally completed	10.00	Under use	ICAR
13.	Mushroom production unit					Totally completed	20.00	Under use	ICAR
14.	Low-cost Shade net house					Totally completed	56.00	Under use	ICAR
15.	Soil and water test Lab					Totally completed	26.00	Under use	ICAR
16.	Portable Carp Hatchery for Fish Breeding					Totally completed	15.00	Under use	ICAR
17.	Duckery unit					Totally completed	80.00	Under use	ICAR
18.	Plant Diagnostic Laboratory					Totally completed	25.00	Under use	ICAR
19.	Micro Irrigation Demonstration Unit					Totally completed	100.00	Under use	ICAR
20.	Micro irrigation system in progeny orchard					Totally completed	10000	Under use	PMKSY
21.	Vermicompost unit (Swachhta action plan)					Totally completed	8.25	Under use	ICAR
22.	Azolla production unit					Totally completed	22.00	Under use	ICAR
23.	Bio floc Unit					Totally completed	5000 litres capacity	Under use	ICAR

*** If not in use, then since when and reason for non-use**

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total km. Run	Present status
Motor Bike (Rajdoot)	1997	32,000.00	-	Not in running condition
Moped (Toro Jaz)	1997	12,500.00	-	Not in running condition
Multi Utility Vehicle (Bolero Plus)	2010	5,20,495.00	1,62,120	In running condition
Motor Bike (Hero Splendor Pro) WB 48A 6693	2016	59,223.00	18,163	In running condition
Scooter (Hero Edge LX) WB 48 A 6695	2016	60,323.00	10,894	In running condition
Multi Utility Vehicle (Bolero B4 BS6) WB 48G 5095	2023	8,58,343.00	3852	In running Condition

C) Equipment & AV aids

Name of equipment	Year of purchase	Cost (Rs.)	Present status	Source of fund
a. Lab Equipment				
Desiccators	1995-96	1540.00	Working condition	ICAR
Sewing machine	1995-96	3605.60	Working condition	ICAR
Mixer cum grinder	1995-96	3430.50	Working condition	ICAR
Weighing balance	1995-96	1700.00	Working condition	ICAR
Mixer grinder Kenstar	2004-05	5,000.00	Working condition	ICAR
Refrigerator Whirlpool	2004-05	16,750.00	Working condition	ICAR
Stabilizer Fizi	2004-05	2450.00	Working condition	ICAR
Shaker	2004-05	24500.00	Working condition	ICAR
Oven	2004-05	9000.00	Working condition	ICAR
Kelplus Digestation System Model KES 08L	2004-05	85,719.00	Working condition	ICAR
Kelplus Distillation System Elite Ex	2004-05	1,38,943.00	Working condition	ICAR
Systronics Micro controller based visible spectra-photometer	2004-05	53,064.00	Working condition	ICAR
Systronics P-H system	2004-05	21,582.00	Working condition	ICAR
Systronics Digital conductivity meter	2004-05	15,444.00	Working condition	ICAR
Systronics Flame photometer Type 128	2004-05	73405.00	Working condition	ICAR
Hotplate with energy regulator	2004-05	2,340.00	Working condition	ICAR
Glass distillation apparatus flux	2004-05	15,617.00	Working condition	ICAR
Physical balance cap.250g with weight box	2004-05	6,310.00	Working condition	ICAR
Shimadzu Electronic Balance	2004-05	66,254.00	Working condition	ICAR
Kjeldal digestion unit	2004-05	6,205.00	Working condition	ICAR
Kjeldal distillation unit	2004-05	10,411.00	Working condition	ICAR
Microscope- Trinocular	2010-11	47,069.00	Working condition	ICAR
Microscope – Stereo	2010-11	21,055.00	Working condition	ICAR
BOD incubator	2010-11	39,132.00	Working condition	ICAR
Autoclave- Vertical	2010-11	21,814.00	Working condition	ICAR
Centrifuge	2010-11	14,200.00	Working condition	ICAR
Microscope Image Projection System (MIPS)	2010-11	31,885.00	Working condition	ICAR
Laminar Flow	2010-11	53,465.00	Working condition	ICAR
Desiccators	2010-11	6,072.00	Working condition	ICAR
Rotary Shaker	2010-11	21,700.00	Working condition	ICAR
Digital Weighing machine	2010-11		Working condition	ICAR
Soil Testing Mini-Lab Mridha parikshak Solar Operated	2015-16	70,000.00	Working condition	ICAR
Soil Testing Mini-Lab Mridha parikshak Solar Operated	2016-17	86,000.00	Working condition	ICAR

Bardizzo Castrator	2016-17	1,600.00	Working condition	ICAR
Auto Vaccinator	2016-17	3,400.00	Working condition	ICAR
pH. Meter	2016-17	1,431.00	Working condition	ICAR
Room Thermometer	2016-17	295.00	Working condition	ICAR
Stethoscope	2016-17	500.00	Working condition	ICAR
Dissolved Oxygen Meter	2016-17	12,022.00	Working condition	ICAR
pH. Meter	2016-17	1,431.00	Working condition	ICAR
Digital Electronic Balance (5.0 mili grams – 300.00 grams)	2016-17	13,400.00	Working condition	ICAR
b. Farm machinery				
Tractor Model Mahindra B 275 – DI	1998-99	2,99,496.00	Working condition	ICAR
Power Tiller Model Kamco KMB 200	2001-02	99,672.00	Working condition	ICAR
Rotavator Model 5/540 R	2012-13	59,000.00	Working condition	ICAR
Bench Floor Scale (Capacity – 200 kg) Model Sana	2010-11	8,000.00	Working condition	ICAR
Precision Scale (Capacity – 600 gms) Model Sana	2010-11	11,200.00	Working condition	ICAR
Portable Carp Hatchery	2010-11	2,21,956.00	Working condition	ICAR
Seed Processing Machine Model 15X/C.H. Standard Capacity 1.5 ton / Hour	2015-16	2,57,800.00	Working condition	ICAR
Elevator 16 Feet complete with 1.5 HP 440 Volt Electric Motor	2015-16	55,000.00	Working condition	ICAR
Mini Grinder	2015-16	73,500.00	Working condition	ICAR
Palletizer Machine	2015-16	39,900.00	Working condition	ICAR
Generator 15 KVA 3 Phase Model CD- 15 of Copper Corporation	2015-16	3,95,025.00	Working condition	ICAR
Laptop HP G 240	2015-16	43,000.00	Working condition	ICAR
Desktop All-in-One HP 20	2015-16	44,430.00	Working condition	ICAR
UPS APC 600 VA	2015-16	2,300.00	Working condition	ICAR
Printer Laserjet M 126 nw	2015-16	12,900.00	Working condition	ICAR
Computer Table and chair	2020-21	17,500.00	Working condition	DAMU
Office Table and chair	2020-21	20,762.00	Working condition	DAMU
Office Almirrah	2020-21	10,169.00	Working condition	DAMU
Computer Table 60"X36"X30"	2020-21	12000.00	Working condition	DAMU
Wooden Chair with Arm	2020-21	5500.00	Working condition	DAMU
Glass Door Almirah 78"X34"X48"	2020-21	12000.00	Working condition	DAMU
Steel Table 30"X24"X48" (2 Nos.)	2020-21	14000.00	Working condition	DAMU
Revolving Chair 18"X18" (3 Nos.)	2020-21	10500.00	Working condition	DAMU
Wall rack glass sliding (2)	2022-23	30,000.00	Working condition	ICAR
Aquaguard water purifier	2022-23	10,500.00	Working condition	ICAR
AC (3 nos)	2022-23	98500.00	Working condition	Seminar hall deposit of RKVK
c. A-V Aids				
Overhead Projector	1994-95	24,477.55	Working condition	ICAR
Sony TV	1998-99	20999.00	Working condition	ICAR
Sony audio system	1998-99	5,990.00	Working condition	ICAR
Sharp VCR	1998-99	13,750.00	Working condition	ICAR
Slide projector	2001-02	14,672.00	Working condition	ICAR
PA system			Working condition	ICAR
Amplifier	2001-02	6400.00	Working condition	ICAR
Microphone ASM580	2001-02	2700.00	Working condition	ICAR
Microphone ACM66	2001-02	1300.00	Working condition	ICAR
Speaker	2001-02	2500.00	Working condition	ICAR

DGT stand	2001-02	290.00	Working condition	ICAR
DGN stand	2001-02	490.00	Working condition	ICAR
LCD projector	2008-09	99,990.00	Working condition	ICAR
Camera	2008-09	23,900.00	Working condition	ICAR
Multimedia Projector SVGA WB 3300 HP	2019-20	32280.00	Working condition	ICAR
d. Office Equipments				
Word processor	1995-96	2,100.00	Working condition	ICAR
Canon photo copier	2003-04	69,988.00	Not in working condition	ICAR
Stabilizer 2KVA	2003-04	4,000.00	Working condition	ICAR
Generator	2008-09	49,500.00	Working condition	ICAR
Fingerprint based Attendance Register Eurovigil I Deter 200	2015-16	20,600.00	Working condition	ICAR
Printer HP L3 1020 Plus	2015-16	8,200.00	Working condition	ICAR
Canon Photo Copier Image RUNNER 2004 N	2016-17	80,273.00	Working condition	ICAR
Desktop Computer Intel Core I 5 Processor with UPS 600 VA	2017-18	47,700.00	Working condition	ICAR
Laptop HP Intel Core I 3 Processor	2017-18	48,900.00	Working condition	ICAR
HP Colour Desk Jet Printer 5821	2017-18		Working condition	ICAR
Aqua guard Water Purifier	2019-20	11500.00	Working condition	ICAR
Blue Star Water Cooler	2019-20	24900.00	Working condition	ICAR
HP Laptop with accessories	2020-21	45,217.00	Working condition	DAMU
HP Laptop	2022-23	29,900.00	Working condition	ICAR
Desktop				
Polar Fan (2)	2023-24	3,300.00	Working Condition	Deposit Trainees Hostel, RKK
Water cooler (2)	2023-24	24,000.00	Working Condition	Deposit Trainees Hostel, RKK

D) Farm implements

Name of equipment	Year of purchase	Cost (Rs.)	Present status	Source of fund
ASPEE Sprayer (10 liters)	1995 - 96	2,050.00	Working condition	ICAR
ASPEE Hand Sprayer	1995 - 96	1,090.00	Working condition	ICAR
Paddy Thresher	1995 - 96	4,000.00	Working condition	ICAR
Hand Rotary Duster	1995 - 96	650.00	Working condition	ICAR
Spray Machine 16 lit. Capacity PVC Burret	2009-10	2,300.00	Working condition	ICAR
Mould Board Plough Model – Bengal Motor Works	2009 - 10	30,000.00	Working condition	ICAR
Mounted Offset 10”X20” Disc Harrow Model – Bengal Motor Works	2009 - 10	35,000.00	Working condition	ICAR
Self-Propelled Power Ripper Model Kumco KB - 120	2010 - 11	81,156.00	Working condition	ICAR
Zero Tillage Machine 11 Tynes	2010 - 11	40,000.00	Working condition	ICAR
ConoWeeder	2012 - 13	Free Supply	Working condition	ICAR
Drum Seeder	2012 – 13	Free Supply	Working condition	ICAR
Bush Cutter	2019-20	24643.00	Working condition	ICAR
Manual and autonomous agricultural spray drone	2022-23	9,98,000.00	Working condition	ICAR
Tractor-Escort 2-wheel drive power operated (Custom hiring center)	2022-23	9,99,990.00	Working condition	ICAR-IIAB
PAGRO Multi speed Agriculture Rotavator (Custom hiring center)- 2	2022-23	2,60,000.00	Working condition	ICAR-IIAB
A.P.P.E Aluminum and hylum sheet Egg Incubator -500 egg capacity (Custom hiring center)	2022-23	69,980.00	Working condition	ICAR-IIAB
Honda Dewatering Pump-2.9 HP- 2 (Custom hiring center)	2022-23	71,998.00	Working condition	ICAR-IIAB

Paddle Wheel aerator (paddles) for fish farming-2 (Custom hiring center)	2022-23	1,00,000.00	Working condition	ICAR-IIAB
Motorized Thresher Machine for multi crops- 2(Custom hiring center)	2022-23	1,00,000.00	Working condition	ICAR-IIAB
Mini Dal Mill-3HP- 100kg Dal/hour (Custom hiring center)	2022-23	93,999.99	Working condition	ICAR-IIAB

1.8. Details of Scientific Advisory Committee (SAC) Meeting conducted in the last year

Date	Number of Participants	Salient Recommendations	Action taken
17.03.2023	30 + all the staff members of RKVK	Suggestion for increasing (a) the numbers of analyses of soil samples, (b) livestock production, (c) planting material production etc.	(a) Numbers of soil samples and water analysis have been increased despite there is problem in Supply-Chain for reagents as well as proper in-time service of the Hardware i.e. "Mridaparikshak". (b) Livestock production is being both increased and diversifies with the establishment of "Goat Farm" of the Kendra as well as rearing of the Poultry Breeds like Kaberi, Guinea Fowl, Kadaknath, Turkey and Aseel with a Total Production of 529 in numbers of Chicks, Cocks, Advanced Growers etc. (c) In 2023, there was a significant increase in Planting Material Production which stood at the numbers of 56, 280 comprising of Vegetable Seedlings of various Vegetables and Fruits Saplings.
		Advice on establishment of a Mushroom Production Unit with support from Directorate of Food Processing and Horticulture, Govt. of West Bengal	The Kendra has submitted Proposal for establishment of a Mushroom Production Unit with financial support from Directorate of Food Processing and Horticulture, Govt. of West Bengal; however, the said Directorate replied that the expenditure has to be borne from the Kendra Budget initially which will be re-imbursed later on. But this is not possible due to lack of adequate fund of KVK.
		All the details of On Farm Trials (OFTs) on presentation slide were not necessary; only conclusion and recommendation should be given.	This recommendation was taken into serious consideration while preparing the Presentation Slides of this SAC Meeting.
		Emphasis on certified seed production in KVK Instructional Farm for distribution to the farming community	KVK produced 76.87 quintals of Foundation and Certified Seeds of Rice, Mustard, Chickpea, Lentil and Finger Millet which were distributed to the farmers through FLD, CFLD and direct sale.
		Proper documentation of RAWE Programme conducted at RKVK	RAWE Programmes of different universities have been documented in the Annual Report properly.
		Suggestion for inclusion of one OFT related to market channel development	This Year One OFT in this regard will be taken up especially in the area of Mandis under (Electronic-National Agriculture Market) E-NAM.
		Replacement of OFT on "Assessing performance of Male Only, Female Only and Mixed (Male + Female) SHGs with respect to annual savings" by OFT on "Impact Assessment of Technologies popularized by Rathindra KVK"	On Farm Trial (OFT) on "Assessing efficacy of Method of Transfer of Technology regarding Millet Cultivation" is being conducted and the Second Phase "Impact Assessment of Millet Cultivation as a New Technology popularized by Rathindra KVK" will be taken up.
		Replacing the OFT on "Comparative performance analysis of Aseel chicks in two types of intensive cage rearing" by a new OFT based on Dairy farming	OFT on Assel bird has been changed to "Effect of herbal galactogogues on milk production in crossbreed milch cattle" as suggested.
		Technology Options of the OFT on "Assessment of different form of "Pashu Chocolate" (UMMB) in lactating dairy cattle" to be modified	Modification of the OFT on "Assessment of different form of "Pashu Chocolate" (UMMB) in lactating dairy cattle" has been done and the re-designed OFT has been started accordingly.
		Organizing Financial awareness Programme	Several training and awareness programme regarding financial awareness has been undertaken in this year
		Emphasis on establishment of Scientific Integrated Farming System Model	Several Scientific Integrated Farming System Models have been established and nurturing of those are being organized in this year also
		Emphasis on distribution of biofertilizer to the farmers	Rhizobium biofertilizer has been distributed to the farmers under CFLD on Kharif Black Gram.

		Focus on entrepreneurship development	Several entrepreneurship development programme has already been started on goat rearing, mushroom production, Poultry rearing, Bee Keeping etc. and those are already reported in the Annual Report.
		More emphasis on Skill Development Training on Orchard Management	RKVK has conducted skill development training on orchard management of Moosambi, Lime etc. during this year.
		More Numbers of Training Programmes on Goat farming	RKVK conducted several Training Programmes on Goat farming in this year.
		Emphasis on Crop Diversification Programme for replacing *Boro* Rice	Training Programmes, CFLD and FLD Programmes on Summer Sesame and Black Gram have been undertaken by RKVK during this year.
		Fish production programme	Capacity building and input distribution programmes have been conducted by RKVK jointly with ICAR-CIFRI, Barrackpore during the year.
		Establishment of Custom Hiring Centre at KVK level	RKVK has already established a Custom Hiring Centre with Farm Machineries like Tractor, Rotavator, Power Thresher, Mini Dal Mill, Aerator for Fishpond, Egg Incubator etc.in this year with the financial help of ICAR-IIAB, Ranchi.

**** Salient recommendation of SAC in bullet form***

2.a. District level data on agriculture, livestock and farming situation (2022)

2.a.1. Major Farming system/enterprise

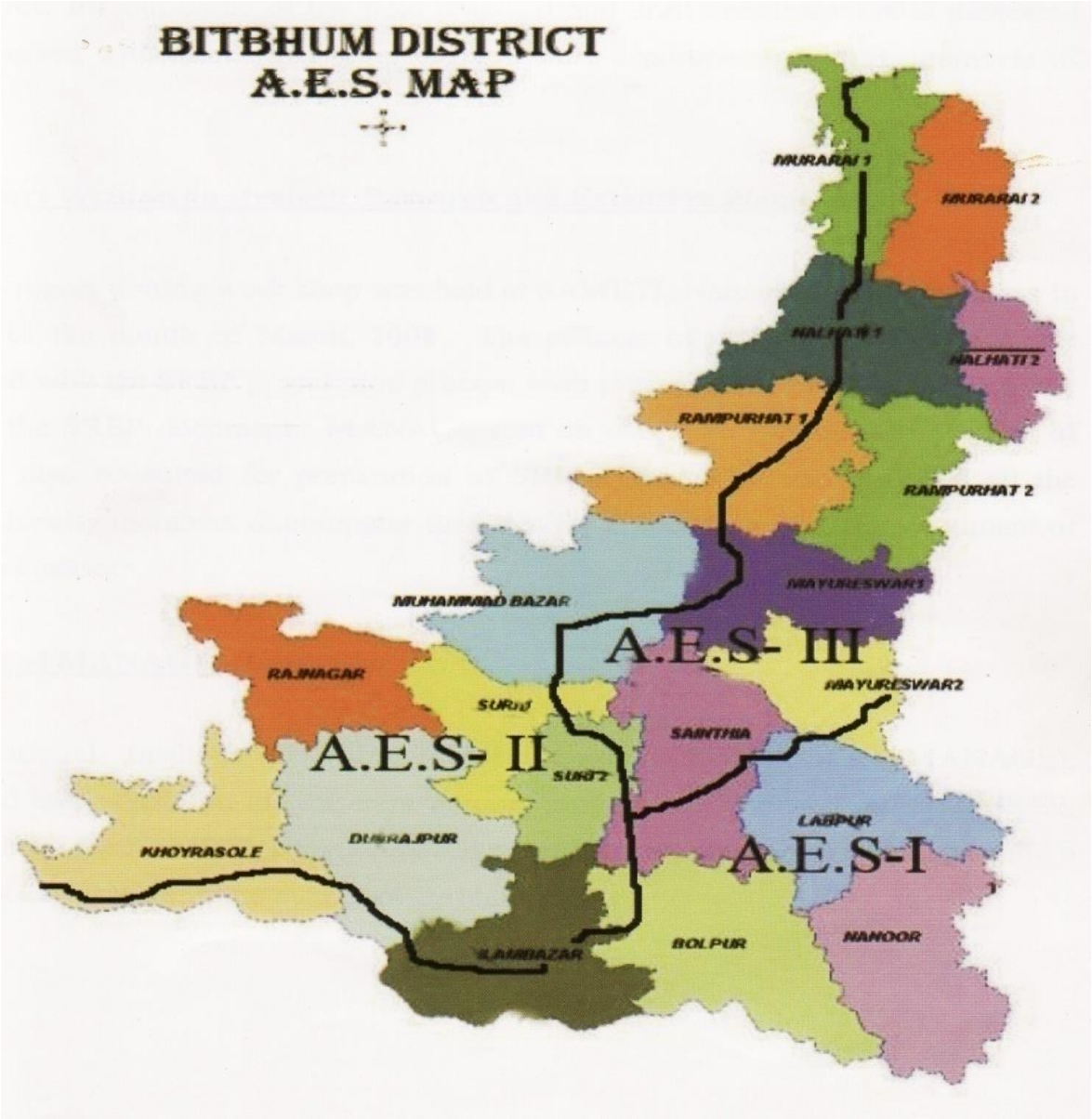
Sl. No.	Farming System/Enterprise
1.	**Upland**- Paddy, red gram, fruit crops
2.	**Mediumland**- Paddy, mustard, potato, sugarcane, sesame, black gram, vegetables, fruit crops, cow, goat, backyard poultry, fishery
3.	**Lowland**- Paddy, sugarcane, wheat, potato, vegetables, duckery, fishery

2.a.2. Agro-climatic Zone

Agro Ecological Sub Region (ICAR): - Assam and Bengal Plain, Hot Sub-humid to Humid (Inclusion of Per-humid) Eco-Region. (15.1)
Eastern plateau (Chhota Nagpur) And Eastern Ghats, Hot Sub-humid Eco-Region (12.3)
Agro-Climatic Zone (Planning Commission): - Lower Gangetic Plain Region (III)
Agro Climatic Zone (NARP): - Red and lateritic Zone (WB-5)

2.a.3. Agro-ecological situation

The Birbhum District is divided into three Agro-Ecological Situation viz. AES – I, AES – II and AES – III. The Rathindra KVK is situated in the AES – I. The Map and detailed features of the Ago-ecological Situations of the District of Birbhum are given here under.



Source: - SREP, Birbhum – 2009.

Agro-ecological Situations of the District of Birbhum

Characteristics	AES – I	AES – II	AES – III
Blocks covered	Blocks under this AES are Bolpur-Sriniketan, Nanoor, Sainthia, parts of Mayureswar – I and Mayureswar – II. parts of Labhpur, Illambazar	Blocks under this AES are Rajnagar, Dubrajpur, Khyrasole, parts of Nalhati – I, Rampurhat – I, Murarai– I, Mayureswar – I, Illambazar, Labhpur, Suri – I and Md. Bazar.	Blocks under this AES are Rampurhat – II, parts of Murarai – I, Murarai – II, Nalhati I, Nalhati – II, Md. Bazar, Suri – I and Suri – II.
Soil Type	Fertile loamy clay soil, 60 percent of cultivable area under loam – clay loam soil. pH – 4.5 – 6.5	Sandy to sandy clay soil. 80 percent of cultivable area under clay soil and slightly acidity problem soil. pH – 5.2 – 6.5	Clay to clay loam soil. 70 percent clay soil with 30 percent loam to clay loam soil. pH – 4.8 – 6.5
Irrigation	75 percent of the total cultivable area is under irrigation out of which 51 percent of area is under surface irrigation.	30 percent of the total cultivable area is under irrigation out of which 20 percent of the area is irrigated from surface water and the rest area is irrigated from minor irrigation sources. Ground water is not easily available.	70 percent of the total cultivable area is under irrigation out of which 60 percent of the area is irrigated from available groundwater. Surface irrigation area is only 10 percent. Ground water is easily available for irrigation purpose.
Important River	Ajoy, Mayurakshi, Dwaraka, Kopai	Hinglow, Bakreswar, Shaal, Ajoy, Chandrabhaga	Dwaraka, Brahmani, Mayurakshi, Pagla, Bansloi
Flood / Draught Proneness	Moderate flood prone area	Moderate draught prone area	Flood prone area
Available Water Area for Fish Cultivation	30 percent of ponds of the district of Birbhum are situated. Sweet water is available for fisheries.	20 percent of ponds of the District of Birbhum are under this AES. A vast sweet water resource is available for fish cultivation.	50 percent of the ponds of the District of Birbhum are under this AES. Sweet water area is available for fish cultivation.
Animal Resources	20 percent of the total Milch Cows of the District of Birbhum is available under this AES out of which upgraded Breed percentage is only 5 percent. Only 15 percent of the total Goat population of the District of Birbhum and 30 percent of the Poultry Population of the District of Birbhum are available in this AES.	50 percent of the total Milch Cows of the District of Birbhum is available under this AES out of which upgraded Breed percentage is only 5 percent. 60 percent of the total Goat population of the District of Birbhum and 40 percent of the Poultry Population of the District of Birbhum are available in this AES.	30 percent of the total Milch Cows of the District of Birbhum is available under this AES out of which upgraded Breed percentage is only 5 percent. Only 25 percent of the total Goat population of the District of Birbhum and 30 percent of the Poultry Population of the District of Birbhum are available in this AES.
Major Crops: **Paddy -** **Oil Seeds –** **Pulses –** **Vegetables –** **Fruits -**	 Pre-Kharif, Kharif and Boro Paddy Mustard, Groundnut and Sesame Black and Green Gram, Lentil, Bengal Gram, Kulthi Seasonal vegetable round the year Mango, Guava, Citrus, Banana, Coconut	 Pre-Kharif, Kharif and Boro Paddy Mustard and Groundnut and Sesame in limited areas. Khesari, Black and Green Gram, Lentil, Bengal Gram, Kulthi Seasonal vegetables round the year Mango, Guava, Citrus, Banana, Coconut	 Pre-Kharif, Kharif and Boro Paddy Mustard, Groundnut and Sesame Black Gram and Green Gram Seasonal vegetables round the year Mango, Guava, Citrus, Banana, Coconut.

Source: - SREP, Birbhum – 2009.

2.a.4. Soil Type

The predominant soil types are old alluvial and red lateritic with low to medium in organic carbon and phosphate content and medium to high in potash. The soil is acidic in nature with pH. range of 5.0 to 6.5.

This district (Birbhum) is enriched by various types of soil namely, Metal (Clay soil retentive of moisture which is best suited for growing Winter Rice, Sugarcane, Wheat, Gram and Kalai); Ental (a sticky brownish clay, it is poor soil and is capable of producing paddy only if manured); Bagha Ental (Ental having colour or tiger, it is poor soil capable of producing paddy only if manured); Beley (is a whitish loose and poor soil , capable of growing paddy and vegetable); Kankure ((it is a reddish, loose laterite soil capable of growing bajra, Maize, Kurthi, Bean and Marual); Bastu (it is a blackish friable rich soil and is largely used for rabi crops); Bindi (it is a poor sandy soil which improves with continued cultivation, capable of producing paddy but can also grow rabi crops if irrigated); RetiRfi (is lighter variant of Pali, it does not grow paddy it is best suited for vegetables, wheat, barley etc.) Pali (deposit of soil is bed of river or in areas subject to riverine inundation; it is very rich soil and is well suited for Sugarcane, Wheat, Gram, Potato and other Vegetables. It is generally reserved for more valuable crops rather than Rice).

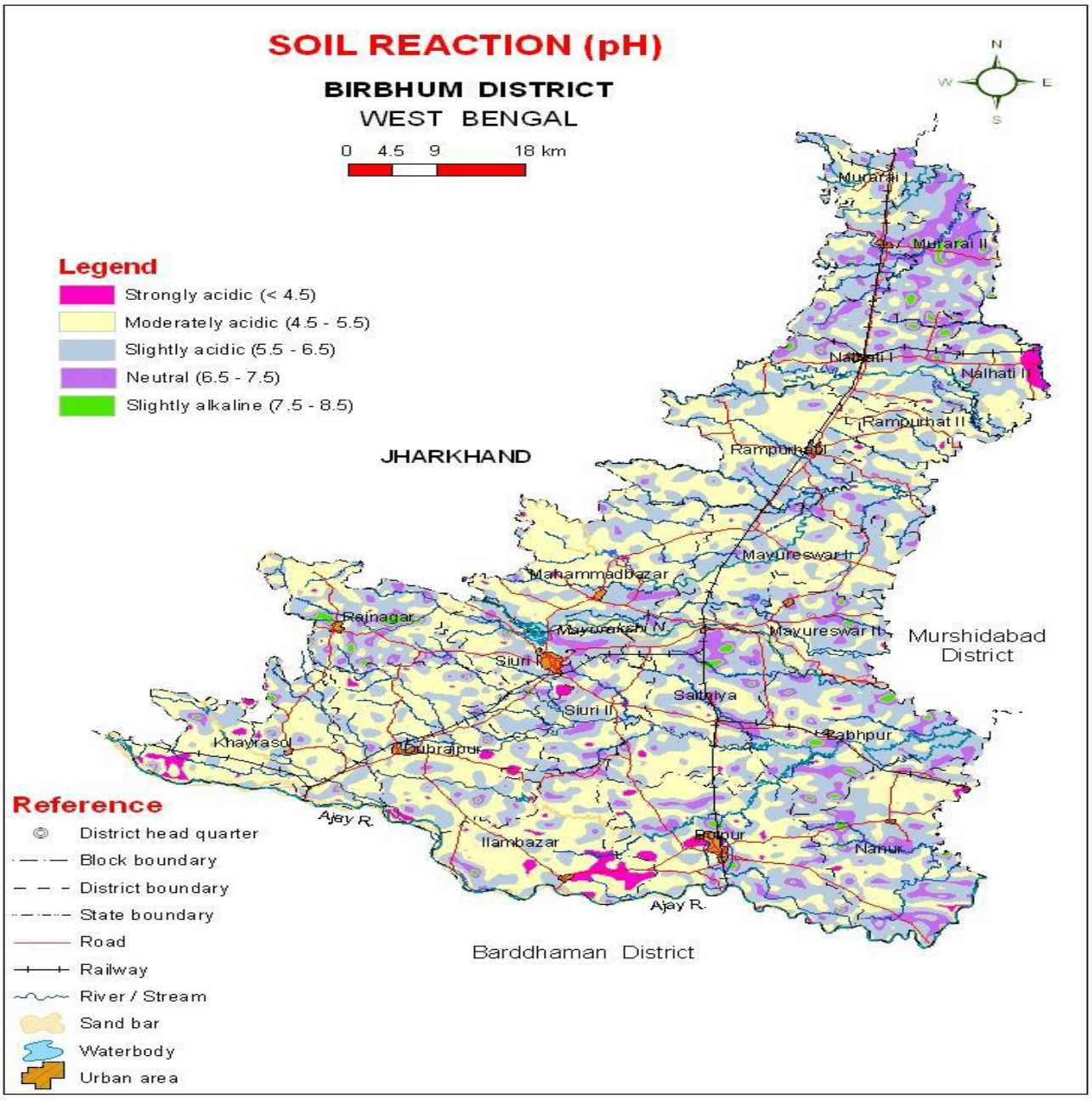


Fig. 5 Spatial distribution of soil reaction (pH) class

Sources: https://birbhum.gov.in/agriculture/

2.a.5 Productivity of major 2-3 crops under cereals, pulses, oilseeds, vegetables, fruits and others

Name of the Crop	2019-20			2020-21		
	Coverage (Ha)	Yield (Kg/Ha)	Production (MT)	Coverage (Ha)	Yield (Kg/Ha)	Production (MT)
Aman Paddy	264763	5138.2	1360392	303395	5100.64	1547509
Aus Paddy	3560	3050	10858	3560	3858	13734.48
Boro Paddy	98148	5160	506444	96685	5139	496864.2
Summer Maize	635	1500	952.5	1025	1655	1696.38
Kharif Maize	425	1850	786.25	1333	1340	1786.22
Groundnut(S)	261	1350	352.35	260	1260	327.60
Groundnut (Kh)	176	1138	200.288	1030	1085.15	1117.70
Mustard	40550	1305	52917.8	41850	1270	53149.50
Linseed	487	660	321.42	485	620	300.70
Sunflower	68	825	56.1	50	652	32.60
Sesamum	6320	798	5043.36	6125	957.25	5863.16
Arhar	348	940	327.12	615	1055	648.83
Lentil	21355	1076	22978	21650	1104	23901.60
Khesari	6000	700	4200	6250	895	5593.75
Gram	12570	1375	17283.8	11655	1520	17715.60
Pea	350	920.25	322.088	345	1272	438.84
S/Moong	2460	670	1648.20	2445	915	2237.18
S/Kalai	1218	675	822.15	1210	955.1	1155.67
Bhadoi Kalai	875	730	638.75	886	665	589.19
Kulthi & other Pulse	318	725	230.55	381	674	256.79
Potato	20767	29175	605881.00	21050	32060	674863.00
Wheat	26965	3255	87771.1	25365	3275	83070.38
S/Cane	1066	78638	83828.1	1065	78638	83749.47

Source – Dept. of Agriculture, Birbhum District, Govt. of West Bengal.
Internet Source https://birbhum.gov.in/agriculture/

Area & Production and productivity of vegetables in Birbhum District [2017-18 to 2021-22]

Name of the Vegetables	2017-18			2018-19			2019-20			2020-21			2021-22		
	Area (in thousand ha.)	Production (in thousand tons)	Productivity (Kg/ha.)	Area (in thousand ha.)	Production (in thousand tons)	Productivity (Kg/ha.)	Area (in thousand ha.)	Production (in thousand tons)	Productivity (Kg/ha.)	Area (in thousand ha.)	Production (in thousand tons)	Productivity (Kg/ha.)	Area (in thousand ha.)	Production (in thousand tons)	Productivity (Kg/ha.)
Beans	2.17	8.52	3926.27	2.28	8.6	3772	2.28	8.66	3798	2.28	8.66	3798.24	0	0	-
Bitter gourd	0.2562	1.132	4418.42	0.2635	1.1878	4508	0.2707	1.7	6280	0.271	1.703	6284.13	0	0	-
Bottle gourd	0.247	2.48	10040.49	0.253	2.578	10190	0.251	2.532	10088	0.252	2.533	10051.5	0	0	-
Brinjal	10.21	171.59	16806.07	10.55	172.84	16383	10.546	171.95	16305	10.54	172.95	16408.91	10.55	171.97	16300.47
Cabbage	2.71	73.50	27121.77	2.75	73.78	26829	2.75	71.75	26091	2.75	71.75	26090.91	2.76	71.78	26007.24
Capsicum	0.0002	0.008	40000.00	0.0002	0.008	40000	0.0002	0.0039	19500	0.0002	0.0041	20500	0	0	-
Carrot	2.70	73.68	27288.89	2.71	73.7	27196	2.511	64.89	25842	2.51	65.61	26139.44	0	0	-
cauliflower	2.31	44.481	19255.84	2.387	44.568	18671	2.396	44.54	18589	2.397	44.64	18623.27	2.4	44.58	18575
Cucumber	2.41	24.125	10010.37	2.455	24.258	9881	2.378	26.33	11072	2.378	28.3	11900.75	0	0	-
Green chili	0.421	1.349	3204.28	0.421	1.349	3204	0.41	1.369	3339	0.41	1.589	3875.60	0	0	-
Elephants Foot Yam	0.0252	4.75	188492.06	0.0255	4.9	192157	0.025	0.821	32840	0.025	0.821	32840	0	0	-
Okra (Lady's finger)	4.29	38.67	9013.99	4.32	38.77	8975	4.31	39.22	9100	4.31	39.41	9143.85	4.32	39.25	9085.64
Onion	1.54	21.02	13649.35	1.85	21.05	11378	1.85	23.05	12459	1.85	23.05	12459.45	1.87	23.1	12352.94
Poited gourd	1.24	5.24	4225.81	1.38	2.73	1978	1.39	6.18	4446	1.39	6.29	4525.17	0	0	-
Peas (Green)	0.81	3.13	3864.20	0.82	3.24	3951	0.81	3.2	3951	0.81	3.2	3950.61	0.81	3.2	3950.61
Radish	1.21	22.20	18347.11	1.82	22.3	12253	1.65	28.5	17273	1.62	32.15	19845.67	1.90	26.70	14052.63
Pumpkin	6.45	97.75	15155.04	6.7	97.9	14612	6.44	99.2	15404	6.38	99.2	15548.58	0	0	-
Sweet Potato	0.84	15.16	18047.62	0.85	15.35	18059	2.35	15.35	15213	0.85	15.36	18070.58	0	0	-
Tomato	2.14	33.47	15640.19	2.3	33.5	14565	0.85	35.75	18059	2.35	35.75	15212.76	2.38	35.8	15042.02
Watermelon	1.06	15.52	14641.51	1	15.6	15600	1.02	16.52	16196	1.02	16.52	16196.07	0	0	-
Others carrot, beet root, leafy vegetables etc.	11.85	35.27	2976.37	11.83	35.32	2986	11.91	41.54	3488	11.91	41.54	3487.82	11.92	38.6	3238.25
Cucurbits	0	0	0.00	0	0	0	0	0	0	0	0	0	12.25	171.7	14016.32
Total Vegetables	**54.8896**	**693.045**	**12626.16**	**56.9652**	**693.5288**	12175	**56.3979**	**703.0559**	12466	**56.3032**	**711.0301**	12628.59	51.16	626.68	12249.41

Area & Production and productivity of fruits in Birbhum District [2017-18 to 2021-22]															
Name of the Fruits	2017-18			2018-19			2019-20			2020-21			2021-22		
	Area (in thousand ha.)	Production (in thousand tons)	Productivity (Kg/ha.)	Area (in thousand ha.)	Production (in thousand tons)	Productivity (Kg/ha.)	Area (in thousand ha.)	Production (in thousand tons)	Productivity (Kg/ha.)	Area (in thousand ha.)	Production (in thousand tons)	Productivity (Kg/ha.)	Area (in thousand ha.)	Production (in thousand tons)	Productivity (Kg/ha.)
Aonia	0.014	0.06	4285.71	0.014	0.06	4285.71	0	0	-	0	0	-	0	0	-
Banana	1.095	14.75	13470.32	1.102	14.814	13442.8	1.102	14.822	13450.1	1.102	14.822	13450.09	1.125	14.83	13182.22
Ber	0.252	1.65	6547.62	0.253	1.651	6525.69	0	0	-	0	0	-	0	0	-
Citrus (Lime Lemon)	0.54	2.74	5074.07	0.546	2.75	5036.63	0	0	-	0	0	-	0	0	-
Citrus (Mandarin Orange)	0	0	-	0	0	-	0	0	-	0	0	-	0	0	-
Citrus (Other)	0.3	2.06	6866.67	0.3	2.07	6900	0.847	4.82	5690.67	0.847	4.82	5690.67	0.85	4.814	5663.52
Citrus (Sweet Orange)	0.006	0.36	60000.00	0.006	0.35	58333.3	0.006	0.353	58833.3	0.006	0.353	58833.33	0	0	-
Citrus (Total)	0	0	-	0.852	5.17	6068.08	0.853	5.173	6064.48	0.853	5.173	6064.47	0	0	-
Guava	1.378	18.605	13501.45	1.38	18.612	13487	1.382	18.635	13484.1	1.382	18.635	13484.08	1.42	18.635	13123.23
Jackfruit	0.095	1.854	19515.79	0.096	1.856	19333.3	0.096	1.856	19333.3	0.096	1.856	19333.33	0.096	1.856	19333.33
Litchi	0.051	0.25	4901.96	0.05	0.245	4900	0.05	0.246	4920	0.05	0.246	4920	0.05	0.246	4920
Mango	1.922	10.13	5270.55	1.922	10.132	5271.59	2.025	10.43	5150.62	2.031	10.43	5135.40	2.04	10.43	5112.74
Papaya	0.735	20.45	27823.13	0.736	19.4	26358.7	0.742	18.55	25000	0.742	18.55	25000	0.75	18.6	24800
Pineapple	0.003	0.036	12000.00	0.003	0.036	12000	0.003	0.044	14666.7	0.003	0.044	14666.66	0.003	0.044	14666.66
Sapota	0.172	1.835	10668.60	0.17	1.808	10635.3	0.15	1.72	11466.7	0.15	1.72	11466.66	0.15	1.72	11466.66
Other fruits	0.266	1.632	6135.34	0.266	1.632	6135.34	0.284	1.692	5957.75	0.284	1.692	5957.7465	0.284	1.692	5957.74
Total Vegetables	**6.829**	**76.412**	**11189.34**	**7.696**	**80.586**	**10471**	**7.54**	**78.341**	**10390**	**7.546**	**78.341**	**10381.8**	**6.768**	**72.867**	**10766.40**

Source: Office of Dy. Director of Horticulture, Govt. of West Bengal, Birbhum

2.a.6. Mean yearly temperature, rainfall, and humidity of the district.

The temperature varies from 12.7˚C to 28.3˚C in winter and from 25.5˚C to 41.5˚C in summer. The average rainfall is 1430 mm. (Source: - http://www.birbhum.gov.in/DDAgri/ddadmin.htm).

The climate of the district is generally dry, mild, and healthy. The hot weather usually lasts from the middle of March to the middle of June, the rainy season from the middle of June to the middle of October, and the cold weather from middle of October to the middle of March. They do not always correspond to this limit. As a rule, the wind is from south-east in summer and from the northwest in winter.

Month-wise weather Data of Bolpur-Sriniketan block of Birbhum District from January, 2023 to December, 2023

Month	Rainfall (mm.) (Total)	Temp. (0 C) Maximum (Mean)	Temp. (0 C) Minimum (Mean)	Relative Humidity (%) (Mean)	
				At 8.30 AM	At 5.30 PM
January,2023	0	25.8	12.3	68.4	37.9
February,2023	0	30.2	15.0	45.4	25.1
March,2023	31	33.1	25.6	81.8	35.9
April,2023	29.5	38.0	23.2	79.9	22.1
May,2023	30	37.4	30.9	93.8	34.3
June,2023	35.5	37.6	27.7	93.4	45.2
July,2023	196.3	34.5	26.3	83.9	76.9
August,2023	269.7	33.1	26.0	88.0	81.2
September,2023	244.7	33.1	25.9	88.5	82.6
October,2023	143.8	31.4	22.7	85.2	80.1
November,2023	4.2	29.3	17.8	82.9	73.8
December,2023	41.3	25.2	13.7	84.2	71.5
Total	**1026**	**388.7**	**267.1**	**975.4**	**666.6**

(Source: - Meteorological Observatory Office, Dept. of Meteorology, Govt. of India, Sriniketan, Birbhum, West Bengal and Automatic Weather Station, Rathindra KVK, Sriniketan, Birbhum)

- Highest rainfall observed in the month of August, 2023 i.e. 269.70 mm
- Lowest rainfall observed in the month of January and February, 2023 i.e. 0.0 mm
- Total rainfall observed from January, 2023 to December, 2023 was 1026.0 mm
- Highest Maximum temperature observed in the month June, i.e. 43.9^0 C
- Lowest Minimum temperature observed in the month January, i.e. 8.2 ^{0} C

Comparison between Observed data (January, 2023 to December, 2023) to Long term Average (LTA) data of Birbhum district

Month	Rainfall (mm.)	LTA Rainfall (mm.)	Temp. (0 C) Maximum (Mean)	LTA Max. Temp. (^{0}C)	Temp. (^{0} C) Minimum (Mean)	LTA Min. Temp. (0 C)	Relative Humidity (%) (Mean)			LTA Avg. Relative Humidity (%)
							At 8.30 AM	At 5.30 PM	Avg. (%)	
January, 2023	0	9.61	25.8	25.15	12.3	12.8	68.4	37.9	53.15	73.56
February, 2023	0	21.25	30.2	28.18	15.0	14.1	45.4	25.1	35.25	62.35
March, 2023	31	32.96	33.1	33.76	25.6	20.7	81.8	35.9	58.85	56.38
April, 2023	29.5	50.52	38.0	37.07	23.2	26.7	79.9	22.1	51	61.05
May, 2023	30	98.09	37.4	36.71	30.9	24.5	93.8	34.3	64.05	73.07
June, 2023	35.5	250.09	37.6	34.61	27.7	26.6	93.4	45.2	69.3	80.06
July, 2023	196.3	330.47	34.5	32.73	26.3	26.8	83.9	76.9	80.4	84.59
August, 2023	269.7	285.13	33.1	32.08	26.0	26.4	88.0	81.2	84.6	87.11
September, 2023	244.7	140.8	33.1	32.18	25.9	26.1	88.5	82.6	85.55	85.04
October, 2023	143.8	102.29	31.4	31.41	22.7	20.3	85.2	80.1	82.65	76.46
November, 2023	4.2	12.71	29.3	29.17	17.8	17.3	82.9	73.8	78.35	72.19
December, 2023	41.3	11.02	25.2	26.1	13.7	13.0	84.2	71.5	77.85	71.5

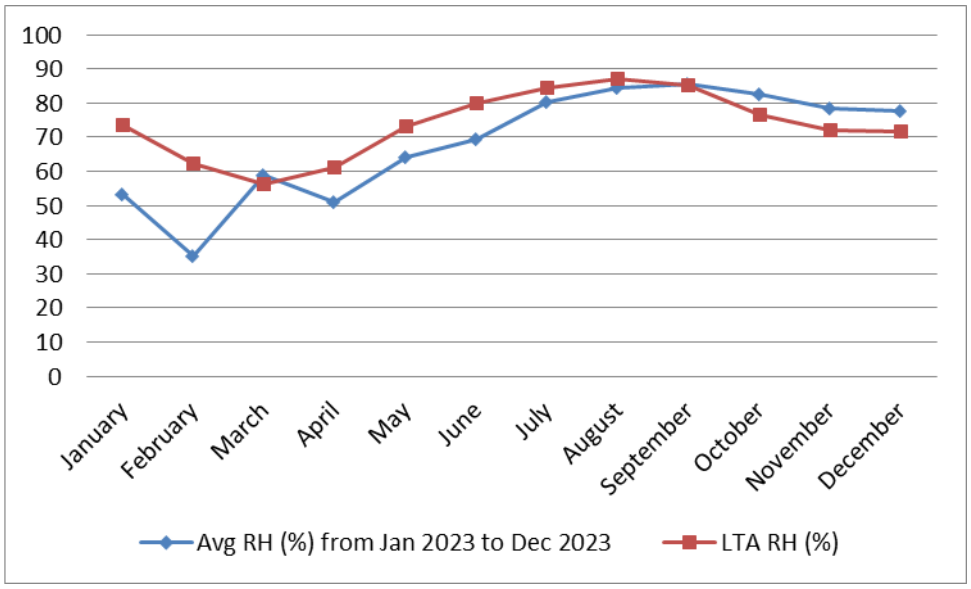
LTA = Long Term Average of 26 Years (From 1989-90 to 2016-17)

(Source: - Meteorological Observatory Office, Dept. of Meteorology, Govt. of India, Sriniketan, Birbhum, West Bengal)

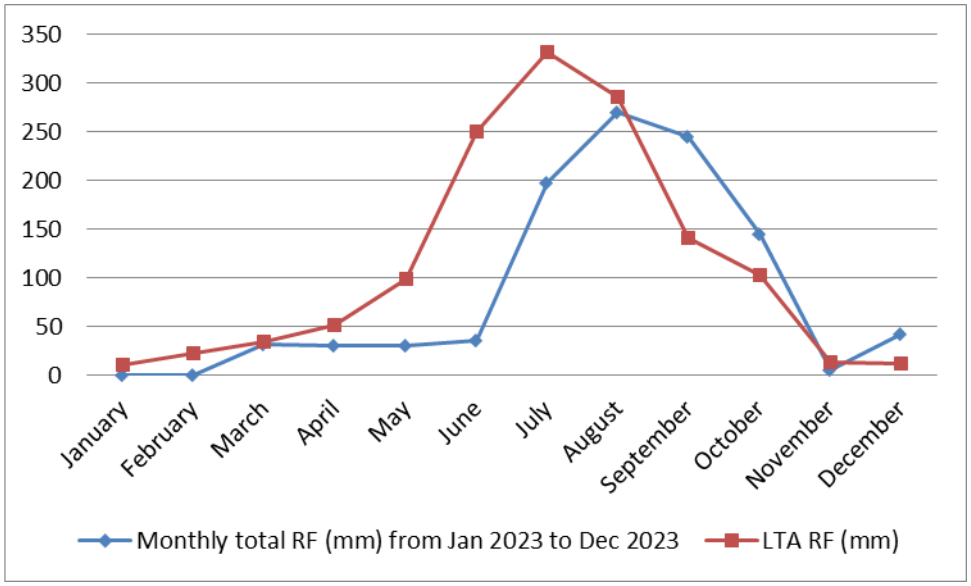
Climate and Rainfall of Birbhum District

Month	Normal / Average Rainfall (In mm.)	Actual Rainfall (in mm) (2008)	Actual Rainfall (in mm) (2009)	Actual Rainfall (in mm) (2010)	Actual Rainfall (in mm) (2011)	Actual Rainfall (in mm) (2012)	Actual Rainfall (in mm) (2013)	Actual Rainfall (in mm) (2014)	Actual Rainfall (in mm) (2015)	Actual Rainfall (in mm) (2016)	Actual Rainfall (in mm) (2017)	Actual Rainfall (in mm) (2018)	Actual Rainfall (in mm) (2019)	Actual Rainfall (in mm) (2020)	Actual Rainfall (in mm) (2021)
January	9.70	14.40	0.00	1.20	7.00	19.60	0.80	5.13	5.60	60.00	5.06	0.00	0.00	26.82	0.00
February	23.20	5.50	11.30	4.10	0.40	4.60	16.60	33.50	9.30	26.90	Nil	0.76	34.10	1.32	0.00
March	23.30	8.20	14.30	5.30	35.20	9.80	1.00	28.30	30.40	16.30	7.09	0.53	27.10	41.04	10.42
April	40.70	27.70	0.00	22.40	69.20	26.00	47.40	0.16	91.20	19.70	49.77	58.91	85.80	65.59	33.49
May	88.70	80.40	198.30	71.90	95.10	43.10	172.70	80.70	69.80	144.70	217.72	96.72	162.86	208.95	247.00
June	234.20	301.10	89.10	221.70	403.10	133.60	154.00	148.80	304.00	220.40	148.70	176.10	65.30	312.86	331.23
July	324.50	408.40	234.50	200.40	186.30	314.80	168.00	429.50	695.56	348.00	489.57	243.00	229.42	391.70	
August	295.70	299.00	317.10	112.70	438.60	207.30	348.90	276.20	289.20	335.60	241.17	193.60	172.57	360.03	
September	258.20	156.80	235.50	220.80	205.60	114.20	148.70	128.60	113.20	357.70	178.19	172.90	286.23	223.16	
October	105.40	90.00	77.90	69.20	18.70	76.00	300.80	5.80	37.40	37.10	217.36	42.30	226.50	47.51	
November	17.50	0.00	0.90	5.80	1.70	88.70	0.00	0.00	4.26	Nil	3.13	0.00	0.26	0.00	
December	9.40	0.00	0.00	49.00	0.00	6.60	0.00	0.00	3.50	Nil	3.70	22.30	1.69	0.00	
Total	**1430.50**	**1391.50**	**1178.90**	**984.50**	**1460.90**	**1044.30**	**1358.90**	**1136.69**	**1653.42**	**1566.40**	**1561.46**	**1007.12**	**1291.83**	**1678.98**	**622.14**

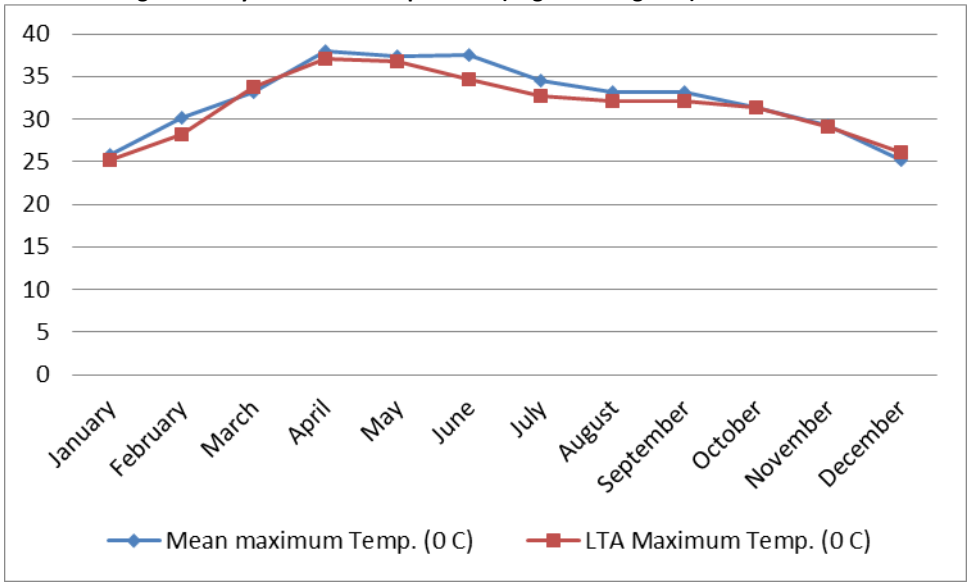
Monthly Average Relative Humidity (%) of Birbhum District in January, 2023 to December, 2023 vis-à-vis Long Term Average Monthly Relative Humidity (%) of Birbhum District.



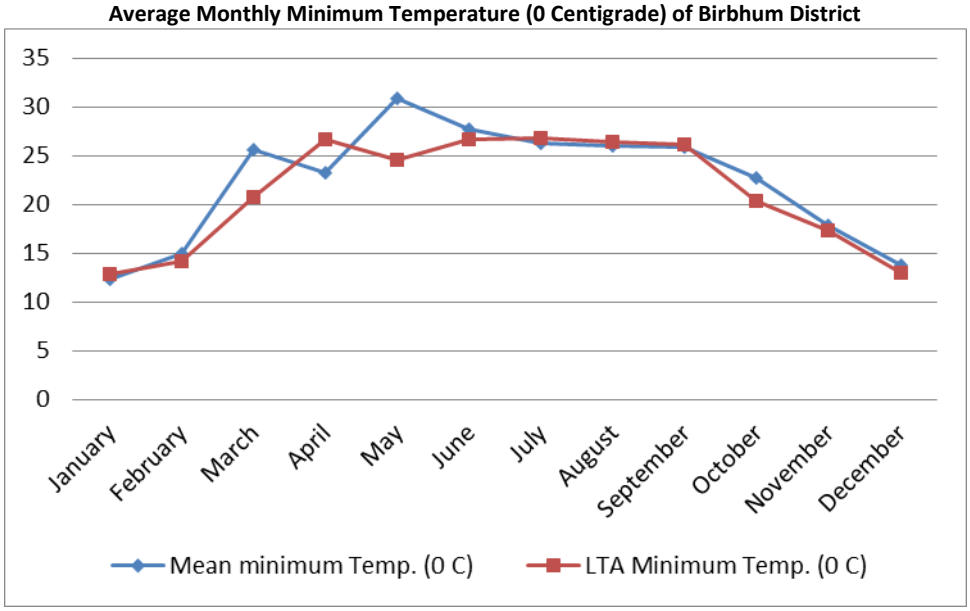
Monthly Rainfall (mm.) of Birbhum District in January, 2023 to December, 2023 vis-à-vis Long Term Average Monthly Rainfall (mm.) of Birbhum District



Monthly Average Maximum Temperature (degree Centigrade) of Birbhum District in January, 2023 to December, 2023 vis-à-vis Long Term Average Monthly Maximum Temperature (degree Centigrade) of Birbhum District



Monthly Average Minimum Temperature (0 Centigrade) of Birbhum District in January, 2023 to December, 2023 vis-à-vis Long Term Average Monthly Minimum Temperature (0 Centigrade) of Birbhum District



2.a.7 Production of major livestock products like milk, egg, meat etc.

Details of Live-Stock and Poultry in the District of Birbhum

Sl. No.	TYPE OF ANIMALS	AS PER 18TH LIVESTOCK CENSUS	AS PER 19TH LIVESTOCK CENSUS	AS PER 20TH LIVESTOCK CENSUS
01.	CROSSBRED & UP-GRADED CATTLE	80,970	2,00,388	3,81,661
02.	INDIGENOUS CATTLE	10,52,384	8,78,856	8,98,610
03.	TOTAL CATTLE & BUFFALO	12,00,934	10,21,354	12,80,271
04.	GOAT	9,41,989	7,53,884	11,68,796
05.	SHEEP	2,16,888	1,64,904	1,59,206
06.	PIG	49,177	30,347	38,374
07.	POULTRY BIRDS	42,23,131	40,87,394	District Data not yet published

(Source: - https://birbhum.gov.in/animal-resource-development/ https://cdn.s3waas.gov.in/s3fc3cf452d3da8402bebb765225ce8c0e/uploads/2021/07/2021071358.pdf)

Source: - Live-Stock Census Report, Govt. Of W. B. And Annual Administrative Reports of Animal Resources Development Department, Govt. Of West Bengal.

Species wise rural and urban population of 20th Livestock Census as on October, 2019 from https://dahd.nic.in/animalhusbandry-statistics															
District	Cattle		Total	Buffalo		Total	Sheep		Total	Goat		Total	Pig		Total
	Rural	Urban		Rural	Urban		Rural	Urban		Rural	Urban		Rural	Urban	
Birbhum	11,69,893	15,440	11,85,333	94,456	482	94,938	1,57,347	1,859	1,59,206	11,46,700	22,096	11,68,796	37,835	539	38,374
Grand Total	11,69,893	15,440	11,85,333	94,456	482	94,938	1,57,347	1,859	1,59,206	11,46,700	22,096	11,68,796	37,835	539	38,374

Sources: https://www.darahwb.org/stasticstics_census.php

Production of Milk in the District of Birbhum During 2019-20 (figures in '000 Tons)										
Sr. No.	Name of the District	Cattle				Buffalo			Goat	TOTAL
		Crossbred	Indigenous	Non-Descriptive	Total Cattle	Indigenous	Non-Descriptive	Total Buffalo		
		Milk Production	Milk Production	Milk Production	Milk Production	Milk Production	Milk Production	Milk Production	Milk Production	Milk Production
1	Birbhum	56.55	56.80	120.94	234.28	5.29	6.36	11.65	10.51	256.44
Total		**56.55**	**56.80**	**120.94**	**234.28**	**5.29**	**6.36**	**11.65**	**10.51**	**256.44**

Sources: https://www.darahwb.org/stasticstics_census.php

Production of Egg in the District of Birbhum During 2019-20 (figures in lakh nos.)							
Sr. No.	Name of the District	FOWL			DUCK		TOTAL
		DESI	IMPROVED		DESI	IMPROVED	
		BACKYARD	BACKYARD	COMMERCIAL	BACKYARD	BACKYARD	
		Egg Production	Egg Production	Egg Production	Egg Production	Egg Production	Egg Production
01.	Birbhum	2449.19	821.20	2235.02	681.96	72.55	6259.92
Total		**2449.19**	**821.20**	**2235.02**	**681.96**	**72.55**	**6259.92**

Sources: https://www.darahwb.org/stasticstics_census.php

Production of Wool in the District of Birbhum During 2019-20 (figures in '000 Kg.)					
Sr. No.	Name of the District	Production of Wool			
		Lamb	Ram	Ewe	TOTAL
01.	Birbhum	6.76	46.81	63.41	116.98
Total		**6.76**	**46.81**	**63.41**	**116.98**

Sources: https://www.darahwb.org/stasticstics_census.php

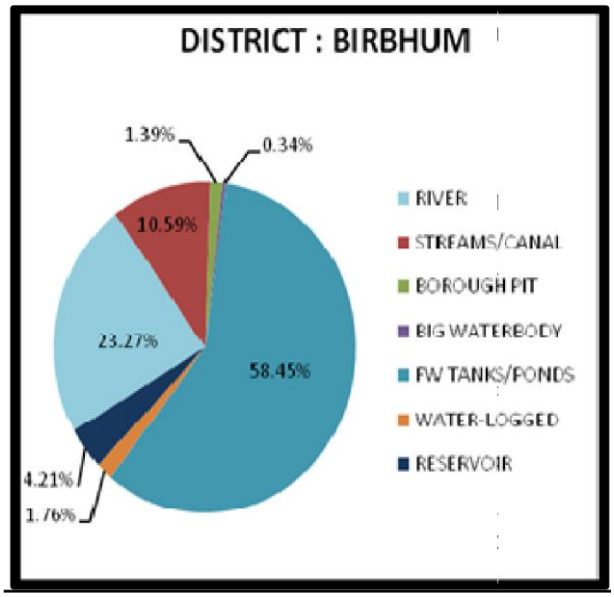
Production of Meat in the District of Birbhum During 2019-20								('000 Tons)
Sr. No.	Name of the District	Cattle Meat	Buffalo Meat	Sheep Meat	Goat Meat	Pig Meat	Poultry Meat	Total Meat
1	Birbhum	0.43	0.35	2.18	17.46	1.79	31.16	53.37
Total		**0.43**	**0.35**	**2.18**	**17.46**	**1.79**	**31.16**	**53.37**

Sources: https://www.darahwb.org/stasticstics_census.php

Production Details of Fishery Sector in Birbhum District

A) Fishery Resources in Birbhum	Related Data
Total tanks	21376.87 ha.
Vested (whole)	817.32 ha.
Vested (Partial)	425.04 ha.
Private ownership	20134.51 ha.
Culturable	14833.80 ha
Semi-derelict	4798.09 ha.
Derelict-	1744.98 ha.
Beel & Baor-	632.16 ha.
Reservoir- (Tilpara -647.77 ha, Deuch-120 ha, Hinglow-524.88 ha, Baidhara-88 ha ,Bakreswar-950 ha, Messenjore-7085.88 ha	9416.53 ha.
River-	795.63 Km
Canal	998.7 Km
Canal with sub canal/branch canal –	5696.85 Km
Total fishermen -	181500 nos.
Total Fishermen Families-	45350 nos.
Functional Fishermen Co-operative Society	20 nos including Birbhum CFCS
Central fishermen Co-operative Society-	1 (One)
Fish seed hatchery (IMC & Magur)	18 nos. (16 – IMC & 2 Magur)
Fish Production Group-	116 nos
B) Demand & Production of Fish Seed & Table Fish	
Total annual demand of table fish – (2020-21)	71802 M. T
Total annual production of table fish-2020-21	79325 M.T.
Spawn Production (2019-20)	616 Million
Fry Production (2019-20)	200 Million
Fingerlings- Production (2019-20)	145 Million
Spawn Production (2020-21)	602 Million
Fry Production (2020-21)	215 Million
Fingerling Production (2020-21)	150 Million

Area Wise Breakup



Area wise break up	No	Water area
≥ 0.034 - <0.20	53445	5152
≥0.20 - < 0.50	26656	8458
≥ 0.50 - <1	8000	5322
≥ 1 - <2.50	1734	2413
≥ 2.50 - <5	133	415
≥5 HA	46	415
Borough pit	319	125
Water-logged	339	654
Reservoir	6	1568
Grand total	90678	24523

Sources: https://birbhum.gov.in/fisheries/

2.b. Details of operational area / villages (2023)

Sl. No.	Name of Taluk	Name of the block	Name of the village	Major crops & enterprises	Major problem identified (Crop wise)	Identified Thrust Areas
1.	Illambazar	Illambazar	Daranda	Rice, Wheat, Mustard, Potato, Red Gram, Black Gram etc.; Vegetable like Brinjal, Chili, Tomato, Elephant Foot Yam, Cucurbits; Fruit plants like Mango, Guava, Papaya, Coconut, Banana etc. and Dairy, Goatery, Poultry, Duckery, Fishery, Batique work, Decorative Candle, Post Harvest Technology of fruits and vegetables, Health and Nutrition of Rural Women and Children; Crop Insurance, Group Formation, Market Led Extension, Marketing Mechanisms of Farm produces.	***Bio physical:*** **Low productivity of all major crops** • Poor and Marginal soil • Low yielding seeds and plants • Limited water resource for irrigation • Imbalanced use of manures and fertilizer • Inappropriate agronomic practices • Inappropriate horticultural practices • Indiscriminate use of chemical pesticide **Poor productivity of livestock** • Inadequate, descriptive and prolific breed • Poor health and management practices • Low quality feed **Poor fish productivity:** • Poor pond management • Poor quality fingerlings **Low-income generation of rural women** • Lack of skill on income generating rural crafts • Lack of skill on fruits and vegetable preservation • Lack of skill on establishment of backyard nutrition garden **Poor health condition of women and child** • Lack of nutritious food resources • Lack of skill on establishment of backyard nutrition garden ***Socio Economic:*** • Lack of knowledge about soil testing-based fertilizer application • Lack of knowledge on good agronomic and horticultural practices • Lack of knowledge on care handling of plant protection equipment • Lack of knowledge on good dairy, goatery, poultry management practices • Multi ownership of ponds • Tendency to lease out ponds. • Lack of knowledge on different income generating programme for women • Lack of knowledge on low-cost nutritious food for women and child • Lack of credit facilities • Lack of Insurance facilities for Crops • Lack of Market Information of the produced products • Lack of Backward and Forward Linkages for the farmers and farm women • Lack of well-established producers' Groups like Farmers' Interest Group (FIG), Farmers' Producers' Organization (FPO) • Lack of Established Farmers' Producers' Company (FPC)	• Soil health management Practices • Supply of Quality seeds/seedlings and saplings • Balanced Management Practices for crop nutrition • Good agronomic practices • Good horticultural practices • Good Animal Husbandry Practices • Appropriate Pest Management • Establishment of Mushroom Units • Establishment of Bee-keeping Units • Formation of Self-Help Groups • Formation of Producers' Groups • Formation of Farmers Club • Organization of Exposure visits of Practicing Farmers, Farm Women and Rural Youths • Improved Extension Activities like Kisan Mobile Message Services • Improvement of livestock productivity • Enhancement of fish productivity • Improvement of women led vocation. • Women and childcare • Institutional Credit Flow Mechanism • Crop and Animal and Fishery Insurance facilities. • Establishment of FPCs • Market led Extension. • Dissemination of Agro-Met Advisories
2.	Illambazar	Illambazar	Sahebdanga			
3.	Bolpur-Sriniketan	Bolpur-Sriniketan	Gopalnagar			
4.	Bolpur-Sriniketan	Bolpur-Sriniketan	Mala			
5.	Bolpur-Sriniketan	Bolpur-Sriniketan	Bergram			
6.	Bolpur-Sriniketan	Bolpur-Sriniketan	Khiruli			
7.	Bolpur-Sriniketan	Bolpur-Sriniketan	Rajabhuro			
8.	Dubrajpur	Dubrajpur	Ashanshuli			
9.	Dubrajpur	Dubrajpur	Jhapartala			
10.	Rampurhat – II	Rampurhat – II	Tarapur			
11.	Rampurhat – II	Rampurhat – II	Bejuri			

2. c. Details of Village Adoption Programme:

Name of the villages adopted by PC and SMS (2023) for its development and action plan.

Name of village	Block	Action taken for development
Asansuli (Dr. S. Mandal)	Dubrajpur	**A. Skill development Training Programmes** on Preparation of Bio Inputs for Natural Farming and Bee keeping. **B. Skill development Training Programme** on Culture and Use of *Azolla.* **C. Front Line Demonstrations (FLDs)** on Nutri Garden **D. Skill development Training Programmes** on Integrated Pest, Disease and Weed Management in Cereals, Pulses and Oilseeds and Vegetables. **E. Women Empowerment** through Skill Development Training on Rural Crafts, Preservation and Value Addition of Fruits and Vegetables, Homestead Kitchen Gardening. **F. Knowledge development Training Programmes** on Crop Insurance, Kisan Credit Card, Farmers' Clubs, Formation of Self-Help Groups (SHGs), Farmers' Producers Organization (FPOs), Formation of Commodity Interest Groups (CIGs), Marketing Mechanisms and Marketing Channels of Farm Products. **G. Cluster Front Line Demonstrations (FLDs)** on different Pulses and Oilseeds. **H. Training Programme** on formation of Integrated Farming Cluster**.** **I. On Farm Testing (OFT)** on Sulphur Management in Onion, Boron and Lime management in Tomato and Zinc management in Potato. **J. Awareness Generation** of rural women on Health and Hygiene Issues, under Swachhata Activities. **K. Analysis of Soil Samples and preparation and distribution of Soil Health Cards.**
Bergram (Sri S. Mondal)	Bolpur Sriniketan	**A. Skill development Training Programmes** on Preparation of Bio Inputs for Natural Farming and Bee keeping. **B. Skill development Training Programme** on Culture and Use of *Azolla.* **C. Front Line Demonstrations (FLDs)** on Nutri Garden, Pheromone trap, seed treatment with *T. viridi.* **D. Skill development Training Programmes** on Integrated Pest, Disease and Weed Management in Cereals, Pulses and Oilseeds and Vegetables. **E. Women Empowerment** through Skill Development Training on Rural Crafts, Preservation and Value Addition of Fruits and Vegetables, Homestead Kitchen Gardening. **F. Knowledge development Training Programmes** on Crop Insurance, Kisan Credit Card, Farmers' Clubs, Formation of Self-Help Groups (SHGs), Farmers' Producers Organization (FPOs), Formation of Commodity Interest Groups (CIGs), Marketing Mechanisms and Marketing Channels of Farm Products. **G. Cluster Front Line Demonstrations (FLDs)** on different Pulses and Oilseeds. **H. Training Programme** on Scientific Bee keeping and Mushroom cultivation. **I. On Farm Testing (OFT)** on Sulphur Management in Onion. **J. Awareness Generation** of rural women on Health and Hygiene Issues, under Swachhata Activities. **K. Analysis of Soil Samples and preparation and distribution of Soil Health Cards.**
Sahebdanga (Dr. P. Ray)	Illambazar	**A. Skill development Training Programmes** on Preparation of Bio Inputs for Natural Farming and Bee keeping. **B. Skill development Training Programme** on Culture and Use of *Azolla.* **C. Front Line Demonstrations (FLDs)** on Nutri Garden, use of Extension Literature in Vernacular Languages. **D. Skill development Training Programmes** on Integrated Pest, Disease and Weed Management in Cereals, Pulses and Oilseeds and Vegetables. **E. Women Empowerment** through Skill Development Training on Rural Crafts, Preservation and Value Addition of Fruits and Vegetables, Homestead Kitchen Gardening. **F. Knowledge development Training Programmes** on Crop Insurance, Kisan Credit Card, Farmers' Clubs, Formation of Self-Help Groups (SHGs), Farmers' Producers Organization (FPOs), Formation of Commodity Interest Groups (CIGs), Marketing Mechanisms and Marketing Channels of Farm Products. **G. Cluster Front Line Demonstrations (FLDs)** on different Pulses and Oilseeds. **H. Training Programme** on formation of Integrated Farming Cluster**.** **I. On Farm Testing (OFT)** on Boron and Lime Management in Tomato, Performance of SHGs with different commodity groups. **J. Awareness Generation** of rural women on Health and Hygiene Issues, under Swachhata Activities. **K. Analysis of Soil Samples and preparation and distribution of Soil Health Cards.**

Daranda (Dr. M. Khan)	Illambazar	**A. Skill development Training Programmes** on Preparation of Bio Inputs for Natural Farming and Bee keeping. **B. Skill development Training Programme** on Culture and Use of *Azolla.* **C. Front Line Demonstrations (FLDs)** on Nutri Garden, use of Doramectin in Sheep for better growth. **D. Skill development Training Programmes** on Integrated Pest, Disease and Weed Management in Cereals, Pulses and Oilseeds and Vegetables. **E. Women Empowerment** through Skill Development Training on Rural Crafts, Preservation and Value Addition of Fruits and Vegetables, Homestead Kitchen Gardening. **F. Knowledge development Training Programmes** on Crop Insurance, Kisan Credit Card, Farmers' Clubs, Formation of Self-Help Groups (SHGs), Farmers' Producers Organization (FPOs), Formation of Commodity Interest Groups (CIGs), Marketing Mechanisms and Marketing Channels of Farm Products. **G. Cluster Front Line Demonstrations (FLDs)** on different Pulses and Oilseeds. **H. Training Programme** on Prophylactic management of Poultry Birds. **I. On Farm Testing (OFT)** on coloured broiler chicken. **J. Awareness Camp** on Hygienic Animal Husbandry under Swachhata Activities. **K. Animal Health Camp for Vaccination.**
Gopalnagar (Sayak Mahato)	Bolpur Sriniketan	**A. Skill development Training Programmes** on Preparation of Bio Inputs for Natural Farming and Bee keeping. **B. Skill development Training Programme** on Culture and Use of *Azolla.* **C. Front Line Demonstrations (FLDs)** on Nutri Garden. **D. Skill development Training Programmes** on Integrated Pest, Disease and Weed Management in Cereals, Pulses and Oilseeds and Vegetables. **E. Women Empowerment** through Skill Development Training on Rural Crafts, Preservation and Value Addition of Fruits and Vegetables, Homestead Kitchen Gardening. **F. Knowledge development Training Programmes** on Crop Insurance, Kisan Credit Card, Farmers' Clubs, Formation of Self-Help Groups (SHGs), Farmers' Producers Organization (FPOs), Formation of Commodity Interest Groups (CIGs), Marketing Mechanisms and Marketing Channels of Farm Products. **G. Cluster Front Line Demonstrations (FLDs)** on different Pulses and Oilseeds. **H. Training Programme** on formation of Integrated Farming Cluster**.** **I. On Farm Testing (OFT)** on Coloured Cauliflower. **J. Awareness Generation** of rural women on Health and Hygiene Issues, under Swachhata Activities. **K. FLD on Coloured Poultry Bird.**

2.1 Priority Thrust Areas.

Sl. No.	Thrust Area
1.	Crop diversification through introduction of Pulses, Oilseeds, major Millets, Horticultural crops like Elephant Foot Yam, Drumstick and High Value Low Volume Horticultural Products like Capsicum, Broccoli, Colored Cauliflower, Brussel's Sprout etc.
2.	Popularization of High Yielding Varieties (HYVs) of major Crops like Rice, Wheat, Mustard, Potato etc. as well as traditional Indigenous Varieties of those Crops.
3.	Cultivation of field Crops which require least water in the Drier regions of the District and cultivation of suitable Horticultural Crops in those regions.
4.	Popularization of improved management practices of Animals, Birds and Fishes
5.	Women empowerment through Rural Crafts and Nutritional Management of Rural Women and Children
6.	Market led Extension, Crop Insurance, Institutional Rural Credit Flow Mechanism and formation and management of Farmers' Groups.

3. TECHNICAL ACHIEVEMENTS

3.A. Details of target and achievement of mandatory activities by KVK during the year

OFT												FLD											
No. of technologies tested: 12												No. of technologies demonstrated: 28											
Number of OFTs		Number of farmers										Number of FLDs		Number of farmers									
Target	Achievement	Target	Achievement									Target	Achievement	Target	Achievement								
			SC		ST		Others		Total						SC		ST		Others		Total		
			M	F	M	F	M	F	M	F	T				M	F	M	F	M	F	M	F	T
12	12	75	38	7	4	0	22	4	64	11	75	1050	1920	1050	576	388	222	171	303	260	1101	819	1920

Training												Extension activities											
Number of Courses		Number of Participants										Number of activities		Number of participants									
Target	Achievement	Target	Achievement									Target	Achievement	Target	Achievement								
			SC		ST		Others		Total						SC		ST		Others		Total		
			M	F	M	F	M	F	M	F	T				M	F	M	F	M	F	M	F	T
76	239	2695	798	685	163	523	6346	506	7307	1714	9021	211	183	10173	1058	514	353	172	2118	1029	3529	1715	5244

Impact of capacity building											Impact of Extension activities										
Number of Participants trained		Number of Trainees got employment (self/ wage/ entrepreneur/ engaged as skilled manpower)									Number of Participants attended		Number of participants got employment (self/ wage/ entrepreneur/ engaged as skilled manpower)								
Target	Achievement	SC		ST		Others		Total			Target	Achievement	SC		ST		Others		Total		
		M	F	M	F	M	F	M	F	T			M	F	M	F	M	F	M	F	T
250	198	38	32	13	06	52	10	103	48	151	10173	5244	1058	514	353	172	2118	1029	3529	1715	5244

Seed production (q)		Planting material (in Lakh)	
Target	Achievement	Target	Achievement
30	47.46	0.50	0.562

Livestock strains and fish fingerlings produced (in lakh) *		Soil, water, plant, manures samples tested (in lakh)	
Target	Achievement	Target	Achievement
0.01000	0.01229	0.00150	0.00155

* Give no. only in case of fish fingerlings

Publication by KVKs							
Item	**Number**	**No. circulated**	**No. of Research papers in NAAS rated Journals**	**Highest NAAS rating of any publication**	**Average NAAS rating of the publications**	**Details of awarded publication, if any**	**Details of Award given to the publication**
Research paper	04	Not Assessed	1	6.55	-	-	-
Seminar/conference/ symposia papers	-	-					
Books	-	-					
Bulletins	93	-					
Newsletter	-	-					
Popular Articles	14	Not Assessed					
Book Chapter	02	Not Assessed					
Extension Pamphlets/ literature	08	4000					
Technical reports	26	Not Assessed					
Electronic Publication (CD/DVD etc)	03	3,000					
Published in You Tube Channel	21	33056					
TOTAL	**164**	Not Assessed					

3.1. Achievements on technologies assessed and refined.
Rabi, 2022-23

OFT – 1

1.	**Title of On farm Trial**	Assessment of Zinc & Boron application in quality and yield of Tomato in lateritic soil of Birbhum District (1st Year)
2.	**Problem diagnosed**	In lateritic acid soil of Birbhum district micronutrient deficiency is very prominent. Stunted growth and cracking of fruits in Tomato is very common. Due to these problems the yield and market price of tomato is reduced
3.	**Details of technologies selected for assessment/refinement**	Farmers' Practice: With Recommended Fertilizer without any micronutrient Technology Option I: Recommended Fertilizer with recommended dose of soil application of Zinc and Boron as basal application Technology Option II: Recommended Fertilizer with Foliar application of Zinc EDTA @ 1g/lt of water and Boron-20 @ 2g/lt of water twice at 25 and 45 DAT
4.	**Source of Technology (ICAR / AICRP / SAU / other, please specify)**	Effect of foliar application of micronutrients in tomato. The Asian Journal of Horticulture: 9 (2): 297-300 Saravaiya *et al.* 2014
5.	**Production System** **Thematic Area**	Paddy-Tomato- Summer vegetables Nutrient Management
6.	**Performance of the Technology with performance indicators**	**recommended fertilizer with** Foliar application of Zinc EDTA @ 1g/lt of water and Boron-20 @ 2g/lt of water twice at 25 and 45 DAT produced significantly better fruit size (55 g) , No. of healthy fruits /plant (30) and yield (45.5 t /ha) along with higher B:C ratio (7.66) than Technology option-I i.e Recommended Fertilizer with recommended dose of soil application of Zinc and Boron and Farmers practice
7.	**Final recommendation for micro level situation**	Tomato should be cultivated with recommended fartiliser dose along with foliar spray of Zinc EDTA @ 1g/lt of water and Boron-20 @ 2g/lt of water twice at 25 and 45 DAT for better yield and quality
8.	**Constraints identified** **feedback for research**	Collection of data was found difficult due to rain before the sowing time. Effect of other micronutrient like Cu may also be tested for some growth disturbance of fruits
9.	**Process of farmers participation and their reaction**	Farmers actively participated in the day-to-day monitoring of the crop and data collection with KVK scientists. Farmers also incurred all the labour cost for cultivation

Table 1: Effect of Zinc and Boron application on yield of tomato at red and lateritic soil of Birbhum

Treatment	No of trials	Av. Fruit Size (g)	Av. no. of healthy fruits / plant	Yield (t/ha)	Gross cost (₹)	Gross return (₹)	Net Return (₹)	B:C ratio
Farmers' Practice: With Recommended Fertilizer without any micronutrient	7	42	20	30.2	68800	362400	293600	5.27
Technology Option I: Recommended Fertilizer with recommended dose of soil application of Zinc and Boron		49	26	40.2	69700	482400	412700	6.92
Technology Option II: Recommended Fertilizer with Foliar application of Zinc EDTA @ 1g/lt of water and Boron-20 @ 2g/lt of water twice at 25 and 45 DAT		55	30	45.5	71200	546000	774800	7.66
Sem ±		1.04	0.88	1.40				0.21
CD (p=0.05)		3.03	2.66	4.23				0.66

Results: From the table it is clear that Technology option -II i.e recommended fertilizer with Foliar application of Zinc EDTA @ 1g/lt of water and Boron-20 @ 2g/lt of water twice at 25 and 45 DAT produced significantly better fruit size (55 g) , No. of healthy fruits /plant (30) and yield (45.5 t /ha) along with higher B:C ratio (7.66) than Technology option-I i.e Recommended Fertilizer with recommended dose of soil application of Zinc and Boron and Farmers practice

OFT-2

1.	**Title of On farm Trial**	Assessment of Lime and Boron application on quality and productivity of Potato in lateritic soil of Birbhum District (1st year)
2.	**Problem diagnosed**	In lateritic acid soil micronutrient deficiency of boron causes cracking the potato tuber and soil acidity increases the scab diseases in different parts of Birbhum district. Due to these problems the yield and market price of potato is reduced.
3.	**Details of technologies selected for assessment/refinement**	Farmers' Practice: With Recommended Fertilizer without any micronutrient and lime Technology Option I: Recommended Fertilizer + Lime @ 10 % of the recommended dose + soil application of Boron @ 4 kg/ha as basal application Technology Option II: Recommended Fertilizer + Lime @ 10 % of the recommended dose + foliar application Boron-20 @ 2g/lt of water twice at 25 and 45 DAT
4.	**Source of Technology (ICAR / AICRP / SAU / other, please specify)**	Effect of applied lime and boron on the availability of nutrients in an acid soil. Journal of Plant Nutrition. 37 (3): 357-373 Barman *et al*. 2014
5.	**Production System** **Thematic Area**	Paddy-Potato- Sesame/Blackgram Nutrient Management
6.	**Performance of the Technology with performance indicators**	Technology Option I i.e Recommended Fertilizer + Lime @ 10 % of the recommended dose + soil application of Boron @ 4 kg/ha as basal application produced significantly larger tuber size (75.6 g), no. of healthy tubers (5.7), yield (31.99 t/ha) and higher B:C ratio of 3.6 than those of Technology Option II: Recommended Fertilizer + Lime @ 10 % of the recommended dose + foliar application Boron-20 @ 2g/lt of water twice at 25 and 45 DAT (tuber size 70.3g, no. of tubers 5.3, yield of 30.77 t/ha and B:C ratio of 2.8) and farmers practice
7.	**Final recommendation for micro level situation**	Potato cultivation with Recommended Fertilizer + Lime @ 10 % of the recommended dose + soil application of Boron @ 4 kg/ha as basal application produced better potato yield with better quality
8.	**Constraints identified** **feedback for research**	Fog during data collection created problems. Effect of different source of nutrients may be tested for lesser cost of cultivation
9.	**Process of farmers participation and their reaction**	Farmers actively participated in the day-to-day monitoring of the crop and data collection with KVK scientists. Farmers also incurred all the labour cost for cultivation

Table 2: Effect of Lime and Boron application on quality and productivity of Potato in lateritic soil of Birbhum District

Treatment	No of trials	Av. Tuber Size (g)	Av. no. of healthy tubers / plant	Yield (t/ha)	Gross Cost (₹)	Gross Return (₹)	Net Return (₹)	B:C ratio
Farmers' Practice: With Recommended Fertilizer without any micronutrient and lime	7	64.9	4.3	24.33	112000	316290	204290	2.8
Technology Option I: Recommended Fertilizer + Lime @ 10 % of the recommended dose + soil application of Boron @ 4 kg/ha as basal application		75.6	5.7	31.99	115500	415870	300370	3.6
Technology Option II: Recommended Fertilizer + Lime @ 10 % of the recommended dose + foliar application Boron-20 @ 2g/lt of water twice at 25 and 45 DAT		70.3	5.3	30.77	116800	400010	283210	3.4
Sem ±		1.20	0.07	0.38				0.03
CD (p=0.05)		3.66	0.21	1.15				0.09

Results: From the table it is revealed that Technology Option I i.e. Recommended Fertilizer + Lime @ 10 % of the recommended dose + soil application of Boron @ 4 kg/ha as basal application produced significantly larger tuber size (75.6 g), no. of healthy tubers (5.7), yield (31.99 t/ha) and higher B:C ratio of 3.6 than those of Technology Option II: Recommended Fertilizer + Lime @ 10 % of the recommended dose + foliar application Boron-20 @ 2g/lt of water twice at 25 and 45 DAT (tuber size 70.3g, no. of tubers 5.3, yield of 30.77 t/ha and B:C ratio of 2.8) and farmers practice

OFT-3

1.	**Title of On farm Trial**	Assessment of Sulphur Application in Productivity Enhancement of Onion under Laterite Track of Birbhum District, West Bengal (1st year)
2.	**Problem diagnosed**	Sulphur is an important nutrient that affects the yield and quality of onion. Red and Laterite soils of West Bengal found deficient in sulphur ranged from 13 to 73 per cent with an average of 45.2 per cent. Among them, as per SAI (Sulphur Availability Index) 87 per cent of the surface soil samples of Birbhum district fall under low sulphur range. Severe sulphur deficiency during bulb development has detrimental effect on yield and quality of onion.
3.	**Details of technologies selected for assessment/refinement**	Farmers' practice: NPK application @ 125-100-100 kg/ha; Source of fertilizer as 10-26-26 (NPK) and Urea (N) Technology option I: NPK application @ 125-100-100 kg/ha; Source of fertilizer as Urea (N), SSP (16% P_2O_5 + 12% S) and MOP (K_2O) Technology option II: NPK application @ 125-100-100 kg/ha; Source of fertilizer as 10-26-26 (NPK), Urea (N) + Sulphur 40 kg/ha (basal)
4.	**Source of Technology (ICAR / AICRP / SAU / other, please specify)**	Shreya Mondal, G. K. Ghosh and Joydip Mandal. 2020. Effect of Graded Levels of Sulphur as Magnesium Sulphate on Yield and Quality of Onion (*Allium cepa* L.) in Red and Lateritic Soils of West Bengal, India. *International Journal of Current Microbiology and Applied Sciences.*9(4): 2858-2866
5.	**Production System** **Thematic Area**	Paddy-Onion-Summer vegetables Nutrient management
6.	**Performance of the Technology with performance indicators**	Technology option II i.e. NPK application @ 125-100-100 kg/ha; Source of fertilizer as 10-26-26 (NPK), Urea (N) + Sulphur 40 kg/ha (basal) in onion produced significantly better bulb size (60.3 g), yield (27.85 t/ha) and B:C ratio of 5.06 than those of Technology option I: NPK application @ 125-100-100 kg/ha; Source of fertilizer as Urea (N), SSP (16% P_2O_5 + 12% S) and MOP (K_2O) (bulb size-59.7g, yield 24.38 t/ha and B:C ratio 4.54) and farers practice.
7.	**Final recommendation for micro level situation**	Application of Sulfur in the Technology option II i.e. NPK application @ 125-100-100 kg/ha; Source of fertilizer as 10-26-26 (NPK), Urea (N) + Sulphur 40 kg/ha (basal) in onion produced significantly better bulb size (60.3 g), yield (27.85 t/ha)
8.	**Constraints identified feedback for research**	Rain at initial stage causes seedling loss. In case kharif onion effect of sulfur source may be tested
9.	**Process of farmers participation and their reaction**	Farmers actively participated in the day-to-day monitoring of the crop and data collection with KVK scientists. Farmers also incurred all the labour cost for cultivation

Table 3: Effect of Sulphur Application in Productivity Enhancement of Onion under Laterite Track of Birbhum District, West Bengal

Treatment	No of trials	Av. bulb Size (g)	Yield (t/ha)	Gross Cost (₹)	Gross Return (₹)	Net Return (₹)	B:C ratio
Farmers' practice: NPK application @ 125-100-100 kg/ha; Source of fertilizer as 10-26-26 (NPK) and Urea (N)	7	47.6	21.33	80000	319950	239950	3.99
Technology option I: NPK application @ 125-100-100 kg/ha; Source of fertilizer as Urea (N), SSP (16% P_2O_5 + 12% S) and MOP (K_2O)		59.7	24.38	80500	365700	285200	4.54
Technology option II: NPK application @ 125-100-100 kg/ha; Source of fertilizer as 10-26-26 (NPK), Urea (N) + Sulphur 40 kg/ha (basal)		60.3	27.85	82500	417750	335250	5.06
Sem ±		2.88	1.06				0.04
CD (*p*=0.05)		8.7	3.2				0.12

Results: From the table it is clearly revealed that Technology option II i.e. NPK application @ 125-100-100 kg/ha; Source of fertilizer as 10-26-26 (NPK), Urea (N) + Sulphur 40 kg/ha (basal) in onion produced significantly better bulb size (60.3 g), yield (27.85 t/ha) and B:C ratio of 5.06 than those of Technology option I: NPK application @ 125-100-100 kg/ha; Source of fertilizer as Urea (N), SSP (16% P_2O_5 + 12% S) and MOP (K_2O) (bulb size-59.7g, yield 24.38 t/ha and B:C ratio 4.54) and farers practice.

Summer 2023

OFT-4

1.	**Title of On farm Trial**	Assessment of insecticide efficiency to control thrips in *summer* green gram (2nd year)
2.	**Problem diagnosed**	Flower drop is a common phenomenon in pulse crop in Birbhum District. Spraying of 'B' is not effective in most of the cases. Proper insecticide is also not tested in the fanner's field. So, yield is low due to low flower set and pod formation due to the attack of thrips.
3.	**Details of technologies selected for assessment/refinement**	Farmers Practice: Application of conventional insecticides as required but not specific for thrips. Technology Option-I- Thiamethoxam 25% WG gm/lit at 21 days interval. Technology Option-II- Thiamethoxam 25% WG (l gm/lit) + Lambda -cyhalothrin 5% SC (0.5 ml/lit) at 21 days interval. Technology Option-Ill- Fipronil + acetamiprid a 1.6 ml/lit of water at 21 days interval
4.	**Source of Technology (ICAR / AICRP / SAU / other, please specify)**	**ICAR** [Package of Practices for Pulse Cultivation, ICAR-IIPR, Kanpur, Uttar Pradesh, India.]
5.	**Production System** **Thematic Area**	Paddy – Mustard/ Potato – green gram Pest Management
6.	**Performance of the Technology with performance indicators**	Thiamethoxam 25% WG (0.2 g./ lit.) + Lambda cyhalothrin 5% SC (0.5 ml per lt.) produced significantly higher yield (13.1 q/ha), lower pest attack intensity (12%), and higher B:C ratio(3.74) than the TO-I (yield 11.8 q/ha), pest attack intensity(21%), and B:C ratio(3.40)) and the TO-III (yield , pest attack intensity, and B:C ratio) and also significantly higher than the Farmers' Practice (pest attack intensity 41%, yield 8 q/ha and B:C ratio 2.55) in Summer Green Gram
7.	**Final recommendation for micro level situation**	Thiamethoxam 25% WG (0.2 g./ lit.) + Lambda cyhalothrin 5% SC (0.5 ml per lt.) produced significantly higher yield (13.1 q/ha), lower pest attack intensity (12%), and higher B:C ratio (3.74) of summer green gram
8.	**Constraints identified** **feedback for research**	Collection of data was found difficult due to rain before the sowing time. Besides thrips, low phosphate may also limiting factor
9.	**Process of farmers participation and their reaction**	Farmers actively participated in the day-to-day monitoring of the crop and data collection with KVK scientists. Farmers also incurred all the labour cost for cultivation

Thematic area: Pest Management (summer, 2023)

Problem definition: Flower drop is a common phenomenon in pulse crops in Birbhum District. Spraying of 'B' is not effective in most cases. Proper insecticide is also not tested in the fanner's field. So, yield is low due to low flower set and pod formation due to the attack of thrips.

Technology assessed: Assessment of insecticide efficiency to control thrips in summer green gram variety PDM 84-179

Table 4: Effect of insecticide efficiency to control thrips of summer green gram at red and lateritic soil of Birbhum

Treatment	No of trials	Thrips attack intensity (%)	Yield (q/ha)	Gross Cost (₹)	Gross Return (₹)	Net Return (₹)	B:C ratio
Farmer's Practice: No insecticide application	7	44	8.1	18800	48600	29800	2.59
Technology Option I: Thiamethoxam 25% WG (0.2 g./lit).		23	11.9	20800	71400	50600	3.43
Technology Option II: Thiamethoxam 25% WG 0.2g./lit. + Lambda cyhalothrin 5% SC (0.5 ml per lit.)		13	13.4	21000	80400	59400	3.82
Technology Option III: Fipronil + Acidamiprid @ 1.6 ml/lit of water		26	10.6	20550	63600	43050	3.09
Sem ±		0.68	0.48		471.55	350.95	0.18
CD (*p*=0.05)		2.06	1.45		1424.08	1059.87	0.54

Results: TO-II i.e. Thiamethoxam 25% WG (0.2 g./ lit.) + Lambda cyhalothrin 5% SC (0.5 ml per lt.) produced significantly higher yield (13.4 q/ha), lower pest attack intensity (13%), and higher B:C ratio(3.82) than the TO-I (yield 11.9 q/ha), pest attack intensity(23%), and B:C ratio(3.43)) and the TO-III (yield , pest attack intensity, and B:C ratio) and also significantly higher than the Farmers' Practice (pest attack intensity 44%, yield 8.1 q/ha and B:C ratio 2.59) in Summer Green Gram

Post Kharif, 2023

OFT-5

1.	**Title of On farm Trial**	Assessment of insecticide efficiency against gram pod borer in Black Gram (2nd year)
2.	**Problem diagnosed**	Gram pod borer is very predominant insect pest which causes severe loses in kharif black gram. The random use of common insecticides is not much effective to control the insect. So, yield is low in post kharif pulse.
3.	**Details of technologies selected for assessment/refinement**	Farmers Practice- Application of Cholorpyriphos 20 EC, Carbosulphan, Cypermethrin however not following any routine practice. Technology Option-I- Thiodicarb 75% (750 gm /ha) at 30 days interval Technology Option-II- Lufenuron 5.4 EC (600 ml/ha) at 30 days interval Technology Option-Ill- Chlorantaniprole 18.5 SC (150 ml/ha at 30 days interval
4.	**Source of Technology (ICAR / AICRP / SAU / other, please specify)**	P K Sarkar and D Ray, Incidence and bio-rational management of black gram pod borer complex with lufenuron and its non-target toxicity. International Journal of Applied Agriculture and Horticulture Science. 4(7) p.901
5.	**Production System** **Thematic Area**	Black gram-fallow Pest Management
6.	**Performance of the Technology with performance indicators**	TO-II i.e. Lufenuron 5.4 EC (600 ml/ha) spraying at 30 days interval produced significantly higher yield (12.6 q/ha), lower pest attack intensity (15%), and higher B:C ratio(3.63) than the TO-I (yield 11.1 q/ha), pest attack intensity(25%), and B:C ratio(3.31)) and the TO-III (yield , pest attack intensity, and B:C ratio) and also significantly higher than the Farmers' Practice (pest attack intensity 48%, yield 7. 8 q/ha and B:C ratio 2.58) in Black Gram.
7.	**Final recommendation for micro level situation**	Spraying of Lufenuron 5.4 EC (600 ml/ha) at 30 days interval can control gram pod borer effectively
8.	**Constraints identified** **feedback for research**	Collection of data was found difficult due to rain before the sowing time. Severe rain also causes more pest attack
9.	**Process of farmers participation and their reaction**	Farmers actively participated in the day-to-day monitoring of the crop and data collection with KVK scientists. Farmers also incurred all the labour cost for cultivation

Thematic area: Pest Management (Post kharif, 2023)

Problem definition: Gram pod borer is very predominant insect pest which causes severe loses in kharif black gram. The random use of common insecticides is not much effective to control the insect. So, yield is low in post kharif pulse.

Technology assessed: Assessment of insecticide efficiency against gram pod borer in Black Gram var. PU-31

Table 5: Effect of insecticide efficiency to control gram pod borer in Black Gram at red and lateritic soil of Birbhum

Treatment	No of trials	Pod borer attack intensity (%)	Yield (q/ha)	Gross Cost (₹)	Gross Return (₹)	Net Return (₹)	B:C ratio
Farmers Practice- Application of Cholorpyriphos 20 EC, Carbosulphan, Cypermethrin however not following any routine practice.	7	50	7.8	18100	46800	28700	2.58
Technology Option-I- Thiodicarb 75% (750 gm /ha) at 30 days interval		27	11.0	20100	66000	46900	3.28
Technology Option-II- Lufenuron 5.4 EC (600 ml/ha) at 30 days interval		16	12.4	20800	74400	53600	3.57
Technology Option-Ill- Chlorantaniprole 18.5 SC (150 ml/ha) at 30 days interval		28	10.0	19950	60000	40050	3.01
Sem ±		0.69	0.43		459.37	340.33	0.16
CD (*p*=0.05)		2.08	1.29		1387.29	1027.79	0.48

Results: TO-II i.e. Lufenuron 5.4 EC (600 ml/ha) spraying at 30 days interval produced significantly higher yield (12.4 q/ha), lower pest attack intensity (16%), and higher B:C ratio(3.57) than the TO-I (yield 11.0 q/ha), pest attack intensity(27%), and B:C ratio(3.28)) and the TO-III (yield , pest attack intensity, and B:C ratio) and also significantly higher than the Farmers' Practice (pest attack intensity 50%, yield 7. 8 q/ha and B:C ratio 2.58) in Black Gram.

January to December, 2023

OFT – 6

Season	2023
Title of On Farm Trial	Assessing efficacy of Method of Transfer of Technology regarding Millet Cultivation
Thematic Area	Methodology of Transfer of Technology
Problem Diagnosed	The chosen Method of Transfer of Technology largely affects the adoption of any given Technology with special reference to economic benefit arising out of that Technology.
Hypothesis	The Methods of Transfer of Technology which emphasizes Skill Training will influences more adoption of the Technology as well as increased level of Income from that specific adopted Technology.
Details of Technologies selected for assessment / Refinement	**Assessment** **Farmers' Option / Prevalent Practice = T_1 = Information and Knowledge Development Training** **T_2= Skill Development Training (Duration – Less than 40 Hours)** **T_3= Skill Development Training (Duration – 40 Hours or More)** **T_4 = Method Demonstration** **T_5 = Result Demonstration**
Source of Technology	Overview of Frontline Extension Tools and Designing OFTs in Extension, R. Roy Burman, ICAR-IARI, New Delhi
Prevalent Practice	Most of the Transfer of Technology Methods are Information and Knowledge Development Training Programmes.
Present Situation	Generally, in West Bengal situation, most of the Transfer of Technology Methods are Information and Knowledge Development Training Programmes.
Performance of the Technology with Performance Indicators	The Programme is going on. **Performance Indicators: -** • Percentage of Adoption by the Practicing Farmers and Farm Women to whom the Millet Cultivation Technology has been transferred. • Average Yearly Net Income from Millet Cultivation from the Adopted Farmers and Farm women.
Final Recommendation for micro level situation	The Programme is going on.
Constraints Identified and Feedback for Research	The Programme is going on.
Process of Farmers Participation and their reaction	Trainee / Partner Farmers are actively participating in the day-to-day monitoring and data collection with KVK scientists.

Rabi 2023-24

OFT-7

1.	**Title of On farm Trial**	Assessment of optimum planting times of coloured Cauliflower in lateritic soil of Birbhum (1st year)
2.	**Problem diagnosed**	Due to cultivation of longer duration paddy the land for Cauliflower cultivation is not available in time. Therefore, farmers plant Cauliflower in delayed winter which cause smaller curd size and more pest and disease attack. Due to depletion of soil moisture, irrigation cost is increased. Furthermore, coloured cauliflower is new introduction to the farmers without knowing the optimum planting time
3.	**Details of technologies selected for assessment/refinement**	Farmers' Practice: Planting on Third week of November Technology Option - I: Planting on November 1st week Technology Option – II: Planting on November 2nd week
4.	**Source of Technology (ICAR / AICRP / SAU / other, please specify)**	S. Islam, S. Datta and Ranjit Chatterjee: Influence of Planting Date on Performance of Cauliflower (Brassica oleracea var. botrytis L.) Varieties at Terai Region of West Bengal, India. International Journal of Bio-resource and Stress Management, 7(3):426-431(2016).
5.	**Production System** **Thematic Area**	Paddy — Mustard/Potato/ Winter Vegetables-Black Gram Climate resilient production technology.
6.	**Performance of the Technology with performance indicators**	Final harvesting is going on
7.	**Final recommendation for micro level situation**	
8.	**Constraints identified.** **feedback for research**	
9.	**Process of farmers participation and their reaction**	

OFT-8

1.	**Title of On farm Trial**	Assessment of Zinc & Boron application in quality and yield of Tomato in lateritic soil of Birbhum District (2nd year)
2.	**Problem diagnosed**	In lateritic acid soil of Birbhum district micronutrient deficiency is very prominent. Stunted growth and cracking of fruits in Tomato is very common. Due to these problems the yield and market price of tomato is reduced
3.	**Details of technologies selected for assessment/refinement**	Farmers' Practice: With Recommended Fertilizer without any micronutrient Technology Option I: Recommended Fertilizer with recommended dose of soil application of Zinc and Boron as basal application Technology Option II: Recommended Fertilizer with Foliar application of Zinc EDTA @ 1g/lt of water and Boron-20 @ 2g/lt of water twice at 25 and 45 DAT
4.	**Source of Technology (ICAR / AICRP / SAU / other, please specify)**	Effect of foliar application of micronutrients in tomato. The Asian Journal of Horticulture: 9 (2): 297-300 Saravaiya *et al.* 2014
5.	**Production System** **Thematic Area**	Paddy-Tomato- Summer vegetables Nutrient Management
6.	**Performance of the Technology with performance indicators**	Programme has been started in the month of November 2023. The programme is in progress
7.	**Final recommendation for micro level situation**	
8.	**Constraints identified** **feedback for research**	
9.	**Process of farmers participation and their reaction**	

OFT-9

1.	**Title of On farm Trial**	Assessment of Lime and Boron application on quality and productivity of Potato in lateritic soil of Birbhum District (2nd year)
2.	**Problem diagnosed**	In lateritic acid soil micronutrient deficiency of boron causes cracking the potato tuber and soil acidity increases the scab diseases in different parts of Birbhum district. Due to these problems the yield and market price of potato is reduced.
3.	**Details of technologies selected for assessment/refinement**	Farmers' Practice: With Recommended Fertilizer without any micronutrient and lime Technology Option I: Recommended Fertilizer + Lime @ 10 % of the recommended dose + soil application of Boron @ 4 kg/ha as basal application Technology Option II: Recommended Fertilizer + Lime @ 10 % of the recommended dose + foliar application Boron-20 @ 2g/lt of water twice at 25 and 45 DAT
4.	**Source of Technology (ICAR / AICRP / SAU / other, please specify)**	Effect of applied lime and boron on the availability of nutrients in an acid soil. Journal of Plant Nutrition. 37 (3): 357-373 Barman *et al*. 2014
5.	**Production System** **Thematic Area**	Paddy-Potato- Sesame/Blackgram Nutrient Management
6.	**Performance of the Technology with performance indicators**	Programme has been started in the month of November 2023. The programme is in progress
7.	**Final recommendation for micro level situation**	
8.	**Constraints identified** **feedback for research**	
9.	**Process of farmers participation and their reaction**	

OFT-10

1.	**Title of On farm Trial**	Assessment of Sulphur Application in Productivity Enhancement of Onion under Laterite Track of Birbhum District, West Bengal (2nd year)
2.	**Problem diagnosed**	Sulphur is an important nutrient that affects the yield and quality of onion. Red and Laterite soils of West Bengal found deficient in Sulphur ranged from 13 to 73 per cent with an average of 45.2 per cent. Among them, as per SAI (Sulphur Availability Index) 87 per cent of the surface soil samples of Birbhum district fall under low sulphur range. Severe sulphur deficiency during bulb development has detrimental effect on yield and quality of onion.
3.	**Details of technologies selected for assessment/refinement**	Farmers' practice: NPK application @ 125-100-100 kg/ha; Source of fertilizer as 10-26-26 (NPK) and Urea (N) Technology option I: NPK application @ 125-100-100 kg/ha; Source of fertilizer as Urea (N), SSP (16% P_2O_5 + 12% S) and MOP (K_2O) Technology option II: NPK application @ 125-100-100 kg/ha; Source of fertilizer as 10-26-26 (NPK), Urea (N) + Sulphur 40 kg/ha (basal)
4.	**Source of Technology (ICAR / AICRP / SAU / other, please specify)**	Shreya Mondal, G. K. Ghosh and Joydip Mandal. 2020. Effect of Graded Levels of Sulphur as Magnesium Sulphate on Yield and Quality of Onion (*Allium cepa* L.) in Red and Lateritic Soils of West Bengal, India. *International Journal of Current Microbiology and Applied Sciences.*9(4): 2858-2866
5.	**Production System** **Thematic Area**	Paddy-Onion-Summer vegetables Nutrient management
6.	**Performance of the Technology with performance indicators**	Programme has been started in the month of November 2022. The programme is in progress
7.	**Final recommendation for micro level situation**	
8.	**Constraints identified** **feedback for research**	
9.	**Process of farmers participation and their reaction**	

OFT- 11

Season	Rabi, 2023 (1st Year)
Title	Effect of herbal galactagogues on milk production in crossbreed milch cattle
Thematic area	Dairy management
Problem diagnosed	Indiscriminate and prolonged use of feed additives, hormones, drugs and synthetic compounds develop adverse effects
Production system	Semi Intensive system
Technology for testing	Application of herbal galactagogue for safe milk production
Existing practice	Use of drugs, hormones etc. to enhance milk production
Objectives	With the demand for organic food and ban on the use of certain antibiotics, hormones like oxytocine, harmful residual effects and cost effectiveness in the livestock feed, the search for alternative feed additives to boost milk production in milch cattle.
Treatment	Control: Farmer's practice (Basal diet) Technology Option I: Satavari (Root) + Chandrasoor (Seed)+Fenugreek (Seed) mixed in the ratio of 1:1:1 (30gm/day) Technology Option II: Satavari(Root) + Chandrasoor(Seed)+Fenugreek(Seed) mixed in the ratio of 1:2:1 (60 gm/day) Technology Option III: Satavari + chandrasoor+Fenugreek mixed in the ratio of 1:1:1 (90 gm/day) Feeding: Administration will start after calving and will be continued for consecutive three months.
Critical Input	KVK input: Herbal galactogogues Farmer's Share: Cow, basal diet
Unit Size	2
Replication	10
Performance /Monitoring Indicator	Milk yield, Fat, SNF, Protein
Programme is Going on.	

OFT-12

Season	Rabi, 2023 (1st year)
Title	Assessment of different form of "Pashu Chocolate" (UMB Block) in lactating dairy cattle
Problem Definition	Poor feeding practices and the low availability of quality feeds in unorganized dairy farming by small and marginal farmer.
Hypothesis	Adequate nutrition plays important role in dairy cattle productivity
Thematic Area	Nutrition Management
Objective	To Assess the performance of UMM Block or Crumpsy Form supplementation to improve the productivity of animal
Details of technology Assessment	Control: Farmer's Practice (Basal Diet) Technology Option – I: Block Form 1+ Farmers practice Technology Option - II: Block Form 2+ Farmers practice (Formula of UMMB1: Wheat Bran-850 g, Molasses- 750 g, Mineral Mixture-40 g, Urea 200 g, CommonSalt-20 g, Vit AD3200 mg, Calcium Carbonate-200 g Formula of UMMB1: Wheat Bran-850 g, Molasses- 750 g, Mineral Mixture-40 g, Urea 100 g, MOC-100g, CommonSalt-20 g, Vit AD3-200 mg)
Micro Farming Situation	Upland farming system
Production System	Semi intensive system
Farmers' Practice	Small farmers keep 2-3 crossbreed milch cows under semi-intensive system
Variety / Breed to be used	Crossbreed cow
Source of Technology	ICAR-IVRI, Animal Nutrition Division, Izzat Nagar, Bareilly, Uttar Pradesh
Numbers of Replications	10
Numbers Of cow per Replication	02
Total Numbers of cows	14
Critical Input	a. KVK Share: Pashu Chocolate (UMB Block), Homemade Form b. Farmer's Share: Cow
Performance / Monitoring Indicators	Palatability, Milk Yield, Feed Intake, Cost effectiveness

3.2 Achievements of Front-Line Demonstration (FLDs)

A. Details of FLDs conducted during the year.

Cereals under SCSP

Sl. No.	Crop	Thematic area	Technology Demonstrated with detailed treatments	Area (ha)		No. of farmers / demonstration									Reasons for shortfall in achievement
				Proposed	Actual	SC		ST		Others		Total			
						M	F	M	F	M	F	M	F	T	
1.	Paddy	Varietal replacement	Ranidhan (IET 19418)	-	6	6	-	8	-	35	-	49	-	**49**	
			Paddy var CR 800		41	13	2	3	1	1	4	35	7	**42**	
			MTU 1153		9	6	0	4	7	6	6	16	45	**61**	
2	Wheat	Varietal replacement	HD 2967												
	Total				**56**									**152**	

Details of farming situation

Crop	Season	Farming situation (RF/Irrigated)	Soil type	Status of soil (Kg/ha)			Previous crop	Sowing date	Harvest date	Seasonal rainfall (mm)	No. of rainy days
				N	P_2O_5	K_2O					
Paddy var Ranidhan (IET 19418)	Kharif,2023	Monocropped medium land	Sandy loam soil with lower pH	Medium	Low	High	Fallow	1-15thAug., 2023	1-10th Dec. 2023	-	-
Paddy var CR 800	Kharif,2023	Monocropped medium land	Sandy loam soil with lower pH	Medium	Low	High	Fallow	1-15thAug., 2023	21-27th Nov. 2023		
Paddy var MTU 1153	Kharif,2023	Monocropped medium land	Sandy loam soil with lower pH	Medium	Low	High	Fallow	1-15thAug., 2023	1-7th Nov. 2023		
Wheat var HD 2967	Rabi 2023-24	Irrigated medium land	Sandy loam soil with lower PH	Medium	Low	High	Rice	1-10 December, 2023	-Crop in the field		

Performance

Cereals

Crop	Thematic Area	Name of the technology demonstrated	No. of Farmers	Area (ha)	Yield (q/ha)		% Increase	*Economics of demonstration (Rs. /ha)				*Economics of check (Rs. /ha)			
					Demo	Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Paddy	Crop Diversification	Improved variety Ranidhan	49	6	67.0	56.3 (Lal swarna)	19	59,000	127300	68300	2.16	62,000	106970	44970	1.73
	Crop Diversification	Improved variety CR 800	42	41	62.1	56.3 (Lal swarna)	10.3	57500	117990	60490	2.05	62,000	106970	44970	1.73
	Crop Diversification	Improved variety MTU 1153	61	9	46.9	39.3	19.3	46,500	89,110	42,610	1.92	49,000	74670	25670	1.52
Wheat	Crop Diversification	Improved variety HD 2967	19	4	Programme is going on										

Frontline demonstrations on oilseed crops

Oilseeds: Under SCSP

Crop	Thematic Area	Name of the technology demonstrated	No. of Farmers	Area (ha)	Yield (q/ha)		% Increase	*Economics of demonstration (Rs. /ha)				*Economics of check (Rs. /ha)			
					Demo	Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Mustard	Crop Diversification	NRCHB-101	7	1.66	13.4	10.20	31.4	20,900	67000	46100	3.21	19,985	51,000	31,015	2.55
Total			7	1.66	13.4	10.20	31.4	20,900	67000	46100	3.21	19,985	51,000	31,015	2.55

*** Economics to be worked out based on total cost of production per unit area and not on critical inputs alone.**

**** BCR= GROSS RETURN/GROSS COST**

Pulses: Under SCSP

Crop	Thematic Area	Name of the technology demonstrated	No. of Farmers	Area (ha)	Yield (q/ha)		% Increase	*Economics of demonstration (Rs. /ha)				*Economics of check (Rs. /ha)			
					Demo	Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Lentil	Crop Diversification	Improved variety KLS 09-3 (Krish)	57	20	Threshing is going on										
Total			**57**	**20**											

*** Economics to be worked out based on total cost of production per unit area and not on critical inputs alone.**

**** BCR= GROSS RETURN/GROSS COST**

Other Crops:

Crop	Thematic area	Name of the technology demonstrated	No. of Farmer	Area (ha)	Yield (q/ha)		% change in yield	Other parameters			*Economics of demonstration (Rs. /ha)				*Economics of check (Rs. /ha)			
					Demo	Check			Demo	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Azolla Kharif 2023	Soil Health Management	Green manuring in rainy season paddy var. Ranidhan (IET19418)	175	20	67.5 (Paddy Yield)	56.1 (Paddy Yield)	20.3	No. of panicles/m^2	395	377	58600	128250	69650	2.2	62000	106590	44590	1.72
Brinjal Kharif, 2023	Crop improvement	Grafted Brinjal Var. VNR 212	25	0.05	661.5	595.2	11.13	Fruit size (g)	136	108	108000	661500	553500	6.13	103000	595200	492200	5.77
Ekangi Pre kharif 2023	Crop diversification	Planting Materials and Methods of Cultivation	56	0.26	134.7	New Introduction	-	Rhizome Size (cm)	3.5	-	130000	808200	678200	6.22	-	--	-	-
Drumstick Kharif, 2023	Varietal Replacement	PKM-1	50	0.35	48.4	18.5 (Local)	161.6	Pod length (Cm)	46	30	65000	387200	322200	5.96	51000	148000	97000	2.9
Finger Millet kharif, 2023	Crop diversification	Variety Indravati	37	2	36.8	19.6	87.8	No. of Fingers per plant	7.3	3.6	32500	128800	96300	3.95	30500	68600	38100	2.25
Turmeric	Varietal replacement	Saguna	37	0.26	212.5	148.0 (Local)	43.6	Rhizome Weight (g)	31.3	20.6	125000	850000	725000	6.8	115000	592000	477000	5.14
Elephant Foot Yam Kharif,2023	Varietal replacement	Bidhan Kusum	20	0.12	681	241 (Local)	182	Corn size (Cm)	30	10	125000	681000	556000	5.45	85000.	241000	156000	2.83
Paddy, Kharif 2023	Seed treatment	Seed treatment with *Trichoderma viridi* @8 g per kg of seeds	120	50	68.6	60.0	14.3	No. of panicles/m^2	397	372	58600	130340	71740	2.22	63000	114000	51000	1.81

Brinjal Kharif, 2023	IPM	Use of pheromone trap against *Leucinodes orbonalis* of brinjal as mechanical control	37	4	622.6	507.3	22.7	% of plant infested	2.5	48	108000	622600	514600	5.76	123000	507300	384300	4.12
Mango Summer, 2023	IPM	Use of Pheromone with funnel trap to control Mango fruit fly	30	4	149	120	24.2	% of infestation	4.7	46.6	128000	596000	468000	4.65	138000	480000	342000	3.47
Green Fodder Maize, Kharif 2023	Varietal replacement	J-1006	33	3.21	394.45	290.5 (Local improved)	35.78	CP%	8.82	7.95	16623	24135	7512	1.45	15781	17980	2199	1.13
Green Fodder Oat, Rabi 2023	New Introduction	Kent	12	1.63	306.7	No Local Variety	-	CP (%)	9.12	2.56 Local grass	21167	31890	10723	1.5				
	Total		**632**	**85.88**														

Livestock

Category	Thematic area	Name of the technology demonstrated	No. of Farmer	No. of units	Major parameters		% change in major parameter	Other parameter		*Economics of demonstration (Rs.)				*Economics of check (Rs.)			
					Demonstration	Check		Demonstration	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Dairy																	
Cow																	
Buffalo																	
Poultry (2023)	New Introduction	Introduction of Kadaknath	30	(10 No. of birds per unit)	Body Weight at 12th wk of age-M/F-1000/790 (gm) Body weight at 23rd wk of age M/F 1.7/1.3 (Kg)			Age of 1st egg laying - 150 day Egg production-140-150		1070	3300	2230	3.08				
Poultry (2023)	New Introduction	Introduction of Kaveri Poultry breed	30	(10 No. of birds per unit)	Body Weight at 6th wk of age-M/F-730/550(gm) Body weight at 23rd wk of age M/F2.12/1.8			Age of 1st egg laying - 130-135 (day)		The programme is going on							
Poultry (2023)	New Introduction	Introduction of Guinea fowl	30	10 No. of birds per unit	Body Weight at 10th wk of age -700 (gm) Body weight at 23rd wk of age-1.4-1.6Kg	The programme is going on											
Rabbitry																	
Piggery																	

Sheep and Goat [Sheep 2022]	Disease Management	Doramectin @ 200 µg/ kg body weight	10	10 (2 lambs-6 months old per unit)	Body weight at 6 months of age - 5.58±0.068 9th month 9.05±0.071 12th month- 12.6±0.084	Body weight at 6 months of age - 5.55±0.067 9th month 7.31±0.074 12th month- 10.51±0.081	19.9	EPG 100 100 Oestrus-6 months	EPG 400 330 Oestrus-7 months	3125	12880	9755	3.12	3657	10200	6543	1.78
Sheep and Goat [Goat 2023]	Disease Management	Doramectin @ 200 µg/ kg body weight	10	10(2 kids 6 months old per unit	Programme is going on												
Duckery																	
Others (pl. specify)																	
Total			60														

*** Economics to be worked out based on total cost of production per unit area and not on critical inputs alone.**

**** BCR= GROSS RETURN/GROSS COST**

Fisheries

Category	Thematic area	Name of the technology demonstrated	No. of Farmer	No. of units	Major parameters		% change in major parameter	Other parameter		*Economics of demonstration (Rs.)				*Economics of check (Rs.)			
					Demonstration	Check		Demonstration	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Common carps																	
Mussels																	
Ornamental fishes																	
Others (pl. specify)																	
		Total															

*** Economics to be worked out based on total cost of production per unit area and not on critical inputs alone.**

**** BCR= GROSS RETURN/GROSS COST**

Other enterprises

Category	Name of the technology demonstrated	No. of Farmer	No. of units	Major parameters		% change in major parameter	Other parameter	*Economics of demonstration (Rs.) or Rs. /Unit			*Economics of check (Rs.) or Rs. /Unit					
				Demonstration	Check		Demonstration	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Oyster mushroom																
Button mushroom																
Vermicompost																
Sericulture																
Apiculture																
Others (pl. specify) Participatory preparation of Extension Literatures in Vernacular Languages	**Participatory preparation of Extension Literatures on seed production of Oilseeds and Pulses in Vernacular Languages**	**100**	**10**	**% Change in Total Production**		**Training on Participatory preparation of Extension Literatures on seed production of Oilseeds and Pulses in Vernacular Languages**		**Other Parameters**								
								% Change in Productivity		**% Change in Gross Cost**		**% Change in Gross Return**		**% Change in Net Return**		**% Change in B: C Ratio**
				Demo	**Check**			**Demo**	**Check**	**Demo**	**Check**	**Demo**	**Check**	**Demo**	**Check**	**Demo**	**Check**
				16 (+)	05 (+)	02	00	18 (+)	03 (+)	19 (+)	45 (+)	20 (+)	10 (+)	27 (+)	08 (+)	20 (+)	09 (+)
Total		**100**	**10**													

*** Economics to be worked out based on total cost of production per unit area and not on critical inputs alone.**

**** BCR= GROSS RETURN/GROSS COST**

Women empowerment

Category	Name of technology	No. of demonstrations	Observations		Remarks
			Demonstration	Check	
Farm Women	Nutrition Garden (2023)	351	2100.00	1000.00	All the vegetables were grown by compost materials available in their home stead. Therefore, keeping quality was good. Income is increased by 110 %.
Pregnant women					
Adolescent Girl					
Other women					
Children					
Neonatal					
Infants					

Farm implements and machinery.

Name of the implement	Crop	Name of the technology demonstrated	No. of Farmer	Area (ha)	Filed observation (output/man hour)		% change in major parameter	Labor reduction (man days)		Cost reduction (Rs. /ha or Rs. /Unit)	
					Demonstration	Check					
Drum Seeder	Kharif, 2023 Paddy Var Rani Dhan	Direct Seeding of Rice in Lines	25	12	-	-	-	60	Manual Transplanting	18000	-

*** Economics to be worked out based on total cost of production per unit area and not on critical inputs alone.**

**** BCR= GROSS RETURN/GROSS COST**

Demonstration details on crop hybrids

Crop	Name of the Hybrid	No. of farmers	Area (ha)	Yield (kg/ha) / major parameter			Economics (Rs. /ha)			
Cereals				**Demo**	**Local check**	**% change**	**Gross Cost**	**Gross Return**	**Net Return**	**BCR**
Bajra										
Maize (Rabi-Summer)										
Paddy										
Sorghum										
Wheat										
Others (Pl. specify)										
Total										
Oilseeds										
Castor										
Mustard										
Safflower										
Sesame										
Sunflower										
Groundnut										
Soybean										
Others (Pl. specify)										
Total										
Pulses										
Green gram										
Black gram										
Bengal gram										
Red gram										
Others (Pl. specify)										
Total										
Vegetable crops										
Bottle gourd										
Capsicum										
Cucumber										
Tomato										
Brinjal										
Okra										
Onion										
Potato										
Field bean										
Others (Pl. specify)										
Total										
Commercial crops										
Cotton										

Coconut										
Others (Pl. specify)										
Total										
Fodder crops										
Napier (Fodder)										
Maize (Fodder)	J1006	33	3.21	394.45	290.5 (Local Improved)	35.78	16623	24135	7512	1.45
Sorghum (Fodder)										
Others (Pl. specify)										
Total		**33**	**3.21**							

Technical Feedback on the demonstrated technologies

Sl. No.	Crop	Feed Back
1.	Rice var. Rani Dhan (IET - 19418)	The Rice var. Rani Dhan (IET - 19418) with an average yield of 68 q / ha may be cultivated instead of MTU - 7029. The percentage yield of the Rice var. Rani Dhan (IET - 19418) increased over 19 percent over the local check MTU - 7029.
2.	Green Manuring with *Azolla* in rice field	After multiplication of *Azolla* and incorporation in Paddy field before transplanting, application of Nitrogenous fertilizers was reduced up to 20.3 per cent for the next Paddy cultivation in the same field.
3.	Crop Diversification through introduction of Ekangi	Ekangi (*K. galanga*) was introduced in mono cropped up and medium land situation replacing Kharif Paddy as crop diversification gave an increased yield of 134.7 q. / ha which fetched a higher B: C ratio of 6.22
4.	Drumstick Var. PKM – 1	The *Baramasia* Drumstick Var. – PKM -1 increase the economic benefits by double than traditional drumstick
5.	Varietal Replacement of Elephant Foot Yam with Var. Bidhan Kusum	The Elephant Foot Yam was cultivated in up-land mono cropped area in rainfed condition as crop diversification satisfactorily with an average yield of 681 q. / ha with 182 per cent increase in yield over local check along with B: C Ratio of 5.45 over 2.83 in Local Check.
6.	Seed treatment with *Trichoderma viridi* @8 g per kg of seeds	Seed treatment with *Trichoderma viridi* in kharif paddy only can increase the yield by 14.3%
7.	Use of Pheromone trap against *spodoptera litura* of brinjal as mechanical control	Use of Pheromone trap in Brinjal increased the yield by 22.7 %
8.	Use of Pheromone with funnel trap to control Mango fruit fly	Use of Pheromone with funnel trap increased the mango yield by 24.2 %
9.	Varietal replacement of green fodder Maize Var J-1006	Green Fodder Maize was cultivated in Kharif with an average yield of 392.25q. / ha with 35.78 per cent increase in yield over local check along with B:C ratio of 1.45 over 1.13 in local check
10.	Use of Doramectin on Lamb 6 months old @200 mg/Kg Body weight	Use of Doramectin helped to increase the body weight by 19.9 %
11.	Participatory preparation of Extension Literatures in Vernacular Languages	Participatory preparation of Extension Literatures in Vernacular Languages helped to change the total production by 16 % than general language (5%)
12.	Nutrition Garden	It increases the availability of veg to farm family and got 110% more income.
13.	Use of Drum Seeder for direct seeding of rice in lines	It is essential and cost effective as it reduces the labour requirement. The Cost reduction by using Drum Seeder is Rs. 18000per hectare with an average labour reduction of 60 per ha.
14.	Introduction of Kadaknath birds	Introduction of Aseel birds gave higher B:C ration of 3.1

Extension and Training activities under FLD

Sl. No.	Activity	Date	No. of activities organized	Number of participants	Remarks
01.	Field Days	26.8.2023, 1.9.2023, 29.9.2023, 23.11.2023, 12.12.2023, 1.9.2023, 12.12.2023	07	136	
02.	Farmers Training	26.08.2023, 29.9.2023, 23.11.2023, 18.3.2023, 24,3.2023, 23.8.2023	6	221	
03.	Media Coverage	Ananda Bazar Patrika and you tube channel	2		
04.	Training for extension functionaries	17.4.2023, 18.4.2023, 11.8.2023	3	108	

Performance of the demonstration under CFLD on Pulse and Oilseed Crops during Kharif 2023 and Rabi 2022-23:

Cluster Front Line Demonstration on Pulses (2023)

Kharif Oilseeds:

Performance of the Demonstration

A. Technical Parameters:

Sl. No.	Crop demonstrated	Existing (Farmer's) variety name	Existing yield (q/ha)	Yield gap (Kg/ha)			Name of Variety + Technology demonstrated	Number of farmers	Area in ha	Yield obtained (q/ha)			Yield gap minimized. (%)		
				District yield (D)	State yield (S)	Potential yield (P)				Max.	Min.	Av.	D	S	P
01.	Kharif- Sesame	Tilottoma	7.7	9.33	9.15	15.00	Var: Suprava (CUMS-17) + Herbicides pendimethalin as pre-emergences @ 3lt/ha+ Micronutrient spray Zinc EDTA @1gm/lt water in 25 and 45 DAS	353	50	12.9	9.8	11	137	150	248

Seeds of Improved Variety Suprava @ 6 Kg. /Ha, Method of seed sowing: - Broadcasting, Application of herbicides. Pendimethalin @ 3 lit. / ha at 1- 3 DAS, Foliar Spray of Micro- Nutrients: - ZN EDTA @ 1 gm. / lit. of water at 25 and 45 DAS.

B. Economic Parameters

Sl. No.	Variety demonstrated & Technology demonstrated	Farmers' Existing plot				Demonstration plot				Farmers' feedback
		Gross Cost (Rs. /ha)	Gross return (Rs. /ha)	Net Return (Rs. /ha)	B:C ratio	Gross Cost (Rs. /ha)	Gross return (Rs. /ha)	Net Return (Rs. /ha)	B:C ratio	
01.	Var: Suprava (CUMS-17) + Herbicides pendimethalin as pre-emergences @ 3lt/ha+ Micronutrient spray Zinc EDTA @1gm/lt water in 25 and 45 DAS	16400	42350	25950	2.58	17000	60500	43500	3.55	42% increase in yield was obtained through the new technology than local check. The new variety fetched more benefit in shorter duration i.e. additional net return Rs.17550/- ha. than local check which is very much encouraging for sesame cultivation in summer season instead of rice.

C. Socio-economic impact parameters

Sl. No.	Crop and variety Demonstrated	Total Produce Obtained	Produce sold. (Kg. /household)	Selling Rate (Rs. /Kg.)	Produce used for own sowing (Kg.)	Produce distributed to other farmers	Purpose for which income gained was utilized	Employment Generated (Man days / household)
01.	Sesame, Var- Suprava (CUMS-17) + Herbicide, Micronutrient Spray	55000	125.00	55.00	Rest is kept for extracting Oil and sowing seeds in the next season.	_	Payment for Labor bill, payment for irrigation, fertilizer and pesticide expenditures.	24

D. Oilseed Farmer's perception of the intervention demonstrated

Sl. No.	Technologies demonstrated (With name)	Farmers' Perception parameters					
		Suitability to their farming system	Likings (Preference)	Affordability	Any negative effect	Is Technology acceptable to all in the group/village	Suggestions, for change/improvement, if any
01.	Var: Suprava (CUMS-17) + Herbicides pendimethalin as pre-emergences @ 3lt/ha+ Micronutrient spray Zinc EDTA@1gm/lit water in 25 and 45 DAS	Suitable to a large extent	Farmers prefer the new improved variety of sesame i.e. Savitri as the existing variety of local check Tilottoma gives a yield and takes more time than new variety Suprava	New improved variety seeds are affordable. However other components of package of practices like herbicides, plant protection chemicals, micro-nutrients, chemical fertilizers, irrigations etc. are not at all affordable except a very few from the beneficiaries when the Programme support would be withdrawn.	None	No, the improved variety and the technological supportive package of practices are acceptable to the partner farmers of the FLD; but other farmers are still apprehensive about the availability of seeds of the improved varieties and the market acceptance of these new improved varieties. The farmers are greatly concerned about the rising prices of inputs like herbicides, micro-nutrients etc. But a good demand of the crop in the market is found.	Availability of seeds should be ensured in time. Low-cost quality herbicides and micro-nutrients should be encouraged for dissemination among the farming community. Proper irrigation facilities should be created by the Governmental agencies.

E. Specific Characteristics of Technology and Performance

Specific Characteristic	Performance	Performance of New Technology vis-a vis Local Check	Farmers Feedback
1. Duration	Satisfactory	New Technology: 85 days, Local check: 95 days	42% increase in yield was obtained through the new technology than local check. The new variety fetched more benefit in shorter duration i.e. additional net return Rs.17550/-ha than local check which is very much encouraging for sesame cultivation in summer season instead of rice.in summer season instead of rice.
2. No. of silique/plant	High	New Technology: 38 days Local Check: 26 days	
3. Colours of the seed	Attractive	New Technology: White Local Check: Brown	

F. Extension activities under FLD conducted till dates:

Sl. No.	Extension Activities organized	Date and place of activity	Number of farmers attended
01.	Field days on Land preparation & Sowing of improved seeds.	26.08.2023	21
02.	Field days on Weed Management & Water Management	01.09.2023	27
03.	Field days on Branching flowering.	29.09.2023	22
04.	Field days on Micronutrient Spray	23.11.2023	17
05.	Field days on Harvesting stage	12.12.2023	11

G. Sequential good quality photographs (as per crop stages i.e., growth & development)

Rathindra KVK Scientists at the ON-Campus Training Programme on the Cluster FLD Programme on Kharif Oilseed

Photographs of Seed Distribution

Collecting data of Sesame on Cluster FLD Kharif Oilseed-2023 at Sowing stage of Farmers field

Collecting data of Sesame on Cluster FLD Kharif Oilseed-2023 at the Vegetative stage

Collecting data of Sesame on Cluster FLD Kharif Oilseed-2023 at the Flowering stage

Collecting data of Sesame on Cluster FLD Kharif Oilseed-2023 at the Maturity stage

H. Details of budget utilization

Crop (Provide crop wise information)	Items	Budget Received (Rs.)	Budget Utilization (Rs.)	Balance (Rs.)
Kharif, Oilseed: 2023-24 (Sesame)	i) Critical input	Allotment Amount Rs. 2,50,000.00	2,26,352.00	23,648.00
	ii) TA/DA/POL etc. for monitoring			
	iii) Extension Activities (Field Day, training etc.)			
	iv)Publication of literature etc.			
Total		**Rs. 2,50,000.00**	**2,26,352.00**	**23,648.00**

Kharif Pulses:

Performance of the Demonstration

A. Technical Parameters:

Sl. No.	Crop demonstrated	Existing (Farmer's) variety name	Existing yield (q/ha)	Yield gap (Kg/ha)			Name of Variety + Technology demonstrated	Number of farmers	Area in ha	Yield obtained (q/ha)			Yield gap minimized. (%)		
				District yield (D)	State yield (S)	Potential yield (P)				Max.	Min.	Av.	D	S	P
01.	Kharif -Black gram	Kali-50	6.0	22	76	800	Var: Indira Urd Pratham+ Herbicides pendimethalin as pre-emergences @ 3lt/ha+ Micronutrient spray Boron-20 @2gm/lt water at 25 and 45 DAS	359	40	13.0	8.4	10.9	2227	644	61

Seeds of Improved Variety- Indira Urd Pratham of Black gram@ 30 kg/, Method of seed sowing: - Broadcasting, Application of herbicides; Pendimethalin @ 3 lit. / ha at 1- 3 DAS, Foliar Spray of Micro- Nutrients: - B- 20 @ 2 gm. / lit. of water at 25 and 45 DAS.

B. Economic parameters

Sl. No.	Variety demonstrated & Technology demonstrated	Farmers' Existing plot				Demonstration plot				Farmers' feedback
		Gross Cost (Rs. /ha)	Gross return (Rs. /ha)	Net Return (Rs. /ha)	B:C ratio	Gross Cost (Rs. /ha)	Gross return (Rs. /ha)	Net Return (Rs. /ha)	B:C ratio	
1.	Black gram Var, PU_31, Herbicides, Micronutrient	18050.00	36,000.00	17,950.00	1.99	19,300.00	65,400.00	46,100.00	3.39	Additional net return is Rs.28,150/- ha

C. Socio-economic impact parameters

Sl. No.	Crop and variety. Demonstrated	Total Produce Obtained	Produce sold. (Kg. /household)	Selling Rate (Rs. /Kg.)	Produce used for own sowing (Kg.)	Produce distributed to other farmers	Purpose for which income gained was utilized	Employment Generated (Man days / household)
01.	Kharif- Black gram Var: Indira urd Pratham+ Herbicides, Micronutrient spray	43,600.00	100.00	60.00	Rest is kept for Dal processing and sowing seeds in the next season	_	Payment for Labor bill, payment for irrigation, fertilizer and pesticide expenditures.	10

D. Pulse Farmer's perception of the intervention demonstrated.

Sl. No.	Technologies demonstrated. (with name)	Farmers' Perception parameters					
		Suitability to their farming system	Likings (Preference)	Affordability	Any negative effect	Is Technology acceptable to all in the group/village	Suggestions, for change/improvement, if any
1.	Kharif- Black gram Var: Indira urd Pratham+ Herbicides, Micronutrient spray	Suitable to a large extent.	Farmers prefer medium size of seeds and luxurious shiny colour of the seeds of the variety.	New improved variety seeds are affordable. However other components of package of practices like herbicides, plant protection chemicals, micro-nutrients, chemical fertilizers, irrigations etc. are not at all affordable except a very few from the beneficiaries when the programme support would be withdrawn.	None	No, the improved variety and the technological supportive package of practices are acceptable to the partner farmers of the Cluster FLD; but other farmers are still apprehensive about the availability of seeds of the improved varieties and the market acceptance of these new improved varieties. The farmers are greatly concerned about the rising prices of inputs like herbicides, micro-nutrients, plant protection chemicals, irrigation water, Labour etc.	Availability of seeds should be ensured in time. Appropriate good quality *Rhizobium* culture should be ensured for supply among the farmers. Low-cost quality herbicides and micro-nutrients should be encouraged for dissemination among the farming community. Proper irrigation facilities should be created by the Governmental agencies.

E) Specific Characteristics of Technology and Performance

Black gram

Specific Characteristic	Performance	Performance of Technology vis-a vis Local Check	Farmers Feedback
1. Duration	Shorter	New variety: 78 days Local check: 92 days	82% increase in yield was obtained through the new technology than local check. The new variety fetched more benefit in shorter duration i.e. additional net return Rs. 28,150/ha than local check which is very much encouraging for Kharif black gram cultivation instead of Kharif rice.
2. No. of branches/ plant	Highly branched	New technology: 18 Local check: 8	
3. No. of pods /plant	Higher	New technology: 49 Local check: 27	

F) Extension activities under FLD conducted till dates:

Sl. No.	Extension Activities organized	Date and place of activity	Number of farmers attended
1.	Training programme of Improved variety in Black gram	26.08.2023	21
2	Field day on Sowing of Black gram in monocropped upland	01.09.2023	27
3	Training on Weed and micronutrient management in Kharif Black gram as crop diversification.	29.09.2023	22
4	Training on Harvesting as seed of Black gram Kharif season	23.11.2023	17
5	Field day on Harvesting and Threshing of Kharif Black gram	12.12.2023	11

G. Sequential good quality photographs (as per crop stages i.e. growth & development)

Rathindra KVK Scientists at the ON-Campus Training Programme on the Cluster FLD Programme on Kharif Pulses

Photographs of Seed Distribution

Collecting data of Blackgram on Cluster FLD Kharif Pulse -2023 at the Vegetative stage

Collecting data of Blackgram on Cluster FLD Kharif Pulse-2023 at the Maturity stage


Collecting data of Blackgram on Cluster FLD Kharif Pulse-2023 at the Harvesting and Threshing stage


H. Details of budget utilization

Crop (provide crop wise information)	Items	Budget Received (Rs.)	Budget Utilization (Rs.)	Balance (Rs.)
Kharif- Black gram Var: Indira urd Pratham	i) Critical input	3,60,000.00	3,30,000.00	29,170.00
	ii) TA/DA/POL etc. for monitoring			
	iii) Extension Activities (Field Day)			
	iv)Publication of literature			
	Total	**3,60,000.00**	**3,30,000.00**	**29,170.00**

3.3 Achievements on Training (Including the sponsored and FLD training programmes):

A) Farmers and farm women (on campus)

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
I. Crop Production													
Weed Management				0			0			0	0	0	0
Resource Conservation Technologies	3	50	17	67	17	27	44	1	8	9	68	52	120
Cropping Systems				0			0			0	0	0	0
Crop Diversification	2	47	2	49	17	1	18	6	0	6	70	3	73
Integrated Farming				0			0			0	0	0	0
Micro irrigation/irrigation				0			0			0	0	0	0
Seed production	1	25	5	30	2	5	7	5	0	5	32	10	42
Nursery management				0			0			0	0	0	0
Integrated Crop Management				0			0			0	0	0	0
Soil & water conservation				0			0			0	0	0	0
Integrated nutrient Management				0			0			0	0	0	0
Production of organic inputs				0			0			0	0	0	0
Others (Production Technology on Millets)	1	17	15	32	4	15	19	4	5	9	25	35	60
Others (Seed Production Technology on Millets)	1	25	8	33	5	0	5	3	0	3	33	8	41
Total	**8**	**164**	**47**	**211**	**45**	**48**	**93**	**19**	**13**	**32**	**228**	**108**	**336**
II. Horticulture													
a) Vegetable Crops													
Production of low volume and high value crops				0			0			0	0	0	0
Off season vegetables				0			0			0	0	0	0
Nursery raising				0			0			0	0	0	0
Exotic vegetables	1	3	0	3	4	0	4	0	0	0	7	0	7
Export potential vegetables				0			0			0	0	0	0
Grading and standardization				0			0			0	0	0	0
Protective cultivation				0			0			0	0	0	0
Others (Production Technology)	1	0	0	0	17	17	34	19	26	45	36	43	79
Total (a)	**2**	**3**	**0**	**3**	**21**	**17**	**38**	**19**	**26**	**45**	**43**	**43**	**86**
b) Fruits													
Training and Pruning				0			0			0	0	0	0
Layout and Management of Orchards	1	4	1	5	9	11	20	5	0	5	18	12	30
Cultivation of Fruit				0			0			0	0	0	0
Management of young plants/orchards				0			0			0	0	0	0
Rejuvenation of old orchards				0			0			0	0	0	0
Export potential fruits				0			0			0	0	0	0
Micro irrigation systems of orchards				0			0			0	0	0	0
Plant propagation techniques				0			0			0	0	0	0
Others				0			0			0	0	0	0

Total (b)	**1**	**4**	**1**	**5**	**9**	**11**	**20**	**5**	**0**	**5**	**18**	**12**	**30**
c) Ornamental Plants													
Nursery Management				0			0			0	0	0	0
Management of potted plants				0			0			0	0	0	0
Export potential of ornamental plants				0			0			0	0	0	0
Propagation techniques of Ornamental Plants				0			0			0	0	0	0
Others				0			0			0	0	0	0
Total (c)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
d) Plantation crops													
Production and Management technology				0			0			0	0	0	0
Processing and value addition				0			0			0	0	0	0
Others				0			0			0	0	0	0
Total (d)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
e) Tuber crops													
Production and Management technology				0			0			0	0	0	0
Processing and value addition				0			0			0	0	0	0
Others				0			0			0	0	0	0
Total (e)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
f) Spices													
Production and Management technology				0			0			0	0	0	0
Processing and value addition				0			0			0	0	0	0
Others				0			0			0	0	0	0
Total (f)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
g) Medicinal and Aromatic Plants													
Nursery management				0			0			0	0	0	0
Production and management technology				0			0			0	0	0	0
Post harvest technology and value addition				0			0			0	0	0	0
Others				0			0			0	0	0	0
Total (g)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Total(a-g)	**3**	**7**	**1**	**8**	**30**	**28**	**58**	**24**	**26**	**50**	**61**	**55**	**116**
III. Soil Health and Fertility Management													
Soil fertility management	2	36	5	41	8	3	11	3	0	3	47	8	55
Integrated water management				0			0			0	0	0	0
Integrated Nutrient Management				0			0			0	0	0	0
Production and use of organic inputs				0			0			0	0	0	0
Management of Problematic soils				0			0			0	0	0	0
Micro nutrient deficiency in crops				0			0			0	0	0	0
Nutrient Use Efficiency				0			0	0	0	0	0	0	0
Balance Use of fertilizer	3	33	6	39	6	12	18	3	1	4	42	19	61
Soil & water testing				0			0			0	0	0	0
others				0			0			0	0	0	0
Total	**5**	**69**	**11**	**80**	**14**	**15**	**29**	**6**	**1**	**7**	**89**	**27**	**116**
IV. Livestock Production and Management													

Dairy Management				0			0			0	0	0	0
Poultry Management	2	0	28	28	0	29	29	0	0	0	0	57	57
Piggery Management	1	1	0	1	0	0	0	8	28	36	9	28	37
Rabbit Management				0			0			0	0	0	0
Animal Nutrition Management				0			0			0	0	0	0
Disease Management	1	0	0	0	0	0	0	4	30	34	4	30	34
Feed & fodder technologies	1	3	11	14	6	47	53	0	7	7	9	65	74
Production of quality animal products				0			0			0	0	0	0
Others (Sheep Farming)				0			0			0	0	0	0
Others (Integrated Farming)				0			0			0	0	0	0
Total	**5**	**4**	**39**	**43**	**6**	**76**	**82**	**12**	**65**	**77**	**22**	**180**	**202**
V. Home Science/Women empowerment													
Household food security by kitchen gardening and nutrition gardening				0			0			0	0	0	0
Design and development of low/minimum cost diet				0			0			0	0	0	0
Designing and development for high nutrient efficiency diet				0			0			0	0	0	0
Minimization of nutrient loss in processing				0			0			0	0	0	0
Processing & cooking				0			0			0	0	0	0
Gender mainstreaming through SHGs				0			0			0	0	0	0
Storage loss minimization techniques				0			0			0	0	0	0
Value addition				0			0			0	0	0	0
Women empowerment				0			0			0	0	0	0
Location specific drudgery reduction technologies				0			0			0	0	0	0
Rural Crafts				0			0			0	0	0	0
Women and child care				0			0			0	0	0	0
Others				0			0			0	0	0	0
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
VI. Agril. Engineering													
Farm machinery & its maintenance				0			0			0	0	0	0
Installation and maintenance of micro irrigation systems				0			0			0	0	0	0
Use of Plastics in farming practices				0			0			0	0	0	0
Production of small tools and implements				0			0			0	0	0	0
Repair and maintenance of farm machinery and implements				0			0			0	0	0	0
Small scale processing and value addition				0			0			0	0	0	0
Post Harvest Technology				0			0			0	0	0	0
Others				0			0			0	0	0	0
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
VII. Plant Protection													
Integrated Pest Management				0			0			0	0	0	0
Integrated Disease Management				0			0			0	0	0	0

Bio control of pests and diseases				0			0			0	0	0	0
Production of bio control agents and bio pesticides	1	7	0	7	15	0	15	8	0	8	30	0	30
Others				0			0			0	0	0	0
Total	**1**	**7**	**0**	**7**	**15**	**0**	**15**	**8**	**0**	**8**	**30**	**0**	**30**
VIII. Fisheries													
Integrated fish farming				0			0			0	0	0	0
Carp breeding and hatchery management				0			0			0	0	0	0
Carp fry and fingerling rearing				0			0			0	0	0	0
Composite fish culture				0			0			0	0	0	0
Hatchery management and culture of freshwater prawn				0			0			0	0	0	0
Breeding and culture of ornamental fishes				0			0			0	0	0	0
Portable plastic carp hatchery				0			0			0	0	0	0
Pen culture of fish and prawn				0			0			0	0	0	0
Shrimp farming				0			0			0	0	0	0
Edible oyster farming				0			0			0	0	0	0
Pearl culture				0			0			0	0	0	0
Fish processing and value addition				0			0			0	0	0	0
Others (Ornamental Fish Rearing)	1	0	0	0	0	0	0	14	16	30	14	16	30
Total	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**14**	**16**	**30**	**14**	**16**	**30**
IX. Production of Input at site													
Seed Production				0			0			0	0	0	0
Planting material production				0			0			0	0	0	0
Bio agents production				0			0			0	0	0	0
Bio pesticides production				0			0			0	0	0	0
Bio fertilizer production				0			0			0	0	0	0
Vermi compost production	1	10	0	10	10	0	10	0	0	0	20	0	20
Organic manures production				0			0			0	0	0	0
Production of fry and fingerlings				0			0			0	0	0	0
Production of Bee colonies and wax sheets				0			0			0	0	0	0
Small tools and implements				0			0			0	0	0	0
Production of livestock feed and fodder				0			0			0	0	0	0
Production of Fish feed				0			0			0	0	0	0
Mushroom production				0			0			0	0	0	0
Apiculture				0			0			0	0	0	0
Others				0			0			0	0	0	0
Total	**1**	**10**	**0**	**10**	**10**	**0**	**10**	**0**	**0**	**0**	**20**	**0**	**20**
X. Capacity Building and Group Dynamics													
Leadership development				0			0			0	0	0	0
Group dynamics				0			0			0	0	0	0
Formation and Management of SHGs				0			0			0	0	0	0
Mobilization of social capital				0			0			0	0	0	0
Entrepreneurial development of farmers/youths				0			0			0	0	0	0
WTO and IPR issues				0			0			0	0	0	0

Others (Market Linkage)				0			0			0	0	0	0
Others (Mobilization of Institutional Support)				0			0			0	0	0	0
Others (Crop Insurance)				0			0			0	0	0	0
Others (Institutional Credit Supply)				0			0			0	0	0	0
Others (Utilization of Govt. Scheme)				0			0			0	0	0	0
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
XI. Agro forestry													
Production technologies	1	1	3	4	6	16	22	2	3	5	9	22	31
Nursery management				0			0			0	0	0	0
Integrated Farming Systems				0			0			0	0	0	0
Others				0			0			0	0	0	0
Total	**1**	**1**	**3**	**4**	**6**	**16**	**22**	**2**	**3**	**5**	**9**	**22**	**31**
XII. Others (Pl. Specify) (Climate Resilience in Agriculture)	1	34	1	35	16	1	17	1	0	1	51	2	53
GRAND TOTAL	**26**	**296**	**102**	**398**	**142**	**184**	**326**	**86**	**124**	**210**	**524**	**410**	**934**

B) Rural Youth (on campus)

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Nursery Management of Horticulture crops				0			0			0	0	0	0
Training and pruning of orchards				0			0			0	0	0	0
Protected cultivation of vegetable crops				0			0			0	0	0	0
Commercial fruit production				0			0			0	0	0	0
Integrated farming				0			0			0	0	0	0
Seed production				0			0			0	0	0	0
Production of organic inputs	1	13	2	15	0	0	0	0	0	0	13	2	15
Planting material production				0			0			0	0	0	0
Vermiculture				0			0			0	0	0	0
Mushroom Production				0			0			0	0	0	0
Beekeeping (STRY)	1	12	0	12	2	0	2	1	0	1	15	0	15
Sericulture				0			0			0	0	0	0
Repair and maintenance of farm machinery and implements				0			0			0	0	0	0
Value addition				0			0			0	0	0	0
Small scale processing				0			0			0	0	0	0
Post Harvest Technology				0			0			0	0	0	0
Tailoring and Stitching				0			0			0	0	0	0
Rural Crafts				0			0			0	0	0	0
Production of quality animal products				0			0			0	0	0	0
Dairying				0			0			0	0	0	0
Sheep and goat rearing	3	16	7	23	35	16	51	8	4	12	59	27	86
Quail farming				0			0			0	0	0	0
Piggery				0			0			0	0	0	0
Rabbit farming				0			0			0	0	0	0
Poultry production	3	11	1	12	1	16	17	4	2	6	16	19	35
Ornamental fisheries				0			0			0	0	0	0
Composite fish culture				0			0			0	0	0	0
Freshwater prawn culture				0			0			0	0	0	0
Shrimp farming				0			0			0	0	0	0
Pearl culture				0			0			0	0	0	0
Cold water fisheries				0			0			0	0	0	0
Fish harvest and processing technology				0			0			0	0	0	0
Fry and fingerling rearing				0			0			0	0	0	0
Others (Training for School Children)	1	24	15	39	3	4	7	0	1	1	27	20	47
Total	**9**	**76**	**25**	**101**	**41**	**36**	**77**	**13**	**7**	**20**	**130**	**68**	**198**

C) Extension Personnel (on campus)

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Productivity enhancement in field crops	1	25	3	28	9	0	9	0	0	0	34	3	37
Integrated Pest Management				0			0			0	0	0	0
Integrated Nutrient management				0			0			0	0	0	0
Rejuvenation of old orchards				0			0			0	0	0	0
Protected cultivation technology				0			0			0	0	0	0
Production and use of organic inputs				0			0			0	0	0	0
Care and maintenance of farm machinery and implements				0			0			0	0	0	0
Gender mainstreaming through SHGs				0			0			0	0	0	0
Formation and Management of SHGs				0			0			0	0	0	0
Women and Child care				0			0			0	0	0	0
Low cost and nutrient efficient diet designing				0			0			0	0	0	0
Group Dynamics and farmers organization				0			0			0	0	0	0
Information networking among farmers				0			0			0	0	0	0
Capacity building for ICT application				0			0			0	0	0	0
Management in farm animals				0			0			0	0	0	0
Livestock feed and fodder production				0			0			0	0	0	0
Household food security				0			0			0	0	0	0
Other (Preparation Techniques and Nursery Raising)			0	0	0	0	0			0	0	0	0
Other (Production and Management Technology)			0	0	0	0	0			0	0	0	0
Other (Yield Increment of Vegetables)			0	0	0	0	0			0	0	0	0
Total	**1**	**25**	**3**	**28**	**9**	**0**	**9**	**0**	**0**	**0**	**34**	**3**	**37**

D) Farmers and farm women (off campus)

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
I. Crop Production													
Weed Management				0			0			0	0	0	0
Resource Conservation Technologies		0	0	0	0	0	0			0	0	0	0
Cropping Systems				0			0			0	0	0	0
Crop Diversification				0			0			0	0	0	0
Integrated Farming				0			0			0	0	0	0
Micro irrigation/irrigation				0			0			0	0	0	0
Seed production				0			0			0	0	0	0
Nursery management				0			0			0	0	0	0
Integrated Crop Management			0	0			0			0	0	0	0
Soil & water conservation				0			0			0	0	0	0
Integrated nutrient Management				0			0			0	0	0	0
Production of organic inputs				0			0			0	0	0	0
Others (Production Technology on Millets)				0			0			0	0	0	0
Others (Seed Production Technology on Millets)				0			0			0	0	0	0
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
II. Horticulture													
a) Vegetable Crops													
Production of low volume and high value crops				0			0			0	0	0	0
Off season vegetables				0			0			0	0	0	0
Nursery raising				0			0			0	0	0	0
Exotic vegetables				0			0			0	0	0	0
Export potential vegetables				0			0			0	0	0	0
Grading and standardization				0			0			0	0	0	0
Protective cultivation				0			0			0	0	0	0
Others				0			0			0	0	0	0
Total (a)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
b) Fruits													
Training and Pruning				0			0			0	0	0	0
Layout and Management of Orchards				0			0			0	0	0	0
Cultivation of Fruit				0			0			0	0	0	0
Management of young plants/orchards				0			0			0	0	0	0
Rejuvenation of old orchards				0			0			0	0	0	0
Export potential fruits				0			0			0	0	0	0
Micro irrigation systems of orchards				0			0			0	0	0	0
Plant propagation techniques				0			0			0	0	0	0
Others				0			0			0	0	0	0
Total (b)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
c) Ornamental Plants													

Nursery Management				0			0			0	0	0	0
Management of potted plants				0			0			0	0	0	0
Export potential of ornamental plants				0			0			0	0	0	0
Propagation techniques of Ornamental Plants				0			0			0	0	0	0
Others				0			0			0	0	0	0
Total (c)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
d) Plantation crops													
Production and Management technology				0			0			0	0	0	0
Processing and value addition				0			0			0	0	0	0
Others				0			0			0	0	0	0
Total (d)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
e) Tuber crops													
Production and Management technology				0			0			0	0	0	0
Processing and value addition				0			0			0	0	0	0
Others				0			0			0	0	0	0
Total (e)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
f) Spices													
Production and Management technology				0			0			0	0	0	0
Processing and value addition				0			0			0	0	0	0
Others				0			0			0	0	0	0
Total (f)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
g) Medicinal and Aromatic Plants													
Nursery management				0			0			0	0	0	0
Production and management technology	1	0	4	4	0	0	0	0	52	52	0	56	56
Post harvest technology and value addition				0			0			0	0	0	0
Others				0			0			0	0	0	0
Total (g)	**1**	**0**	**4**	**4**	**0**	**0**	**0**	**0**	**52**	**52**	**0**	**56**	**56**
Total(a-g)	**1**	**0**	**4**	**4**	**0**	**0**	**0**	**0**	**52**	**52**	**0**	**56**	**56**
III. Soil Health and Fertility Management													
Soil fertility management				0			0			0	0	0	0
Integrated water management				0			0			0	0	0	0
Integrated Nutrient Management				0			0			0	0	0	0
Production and use of organic inputs				0			0			0	0	0	0
Management of Problematic soils				0			0			0	0	0	0
Micro nutrient deficiency in crops			0	0		0	0			0	0	0	0
Nutrient Use Efficiency				0			0			0	0	0	0
Balance Use of fertilizer				0			0			0	0	0	0
Soil & water testing				0			0			0	0	0	0
others				0			0			0	0	0	0
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
IV. Livestock Production and Management													
Dairy Management	2	31	19	50	24	0	24	0	0	0	55	19	74
Poultry Management	1	0	0	0	0	0	0	6	34	40	6	34	40

Piggery Management	**1**	**1**	**0**	1	**0**	**0**	0	**1**	**28**	29	2	28	30
Rabbit Management				0			0			0	0	0	0
Animal Nutrition Management	1	4	0	4	21	25	46	0	0	0	25	25	50
Disease Management	4	58	42	100	21	42	63	4	8	12	83	92	175
Feed & fodder technologies				0			0			0	0	0	0
Production of quality animal products				0			0			0	0	0	0
Others (Sheep Farming)	1	1	7	8	8	14	22	0	1	1	9	22	31
Others (Integrated Farming)	1	0	12	12	0	32	32	0	15	15	0	59	59
Total	**11**	**95**	**80**	**175**	**74**	**113**	**187**	**11**	**86**	**97**	**180**	**279**	**459**
V. Home Science/Women empowerment													
Household food security by kitchen gardening and nutrition gardening	1	22	2	24	34	2	36	0	0	0	56	4	60
Design and development of low/minimum cost diet				0			0			0	0	0	0
Designing and development for high nutrient efficiency diet				0			0			0	0	0	0
Minimization of nutrient loss in processing				0			0			0	0	0	0
Processing & cooking				0			0			0	0	0	0
Gender mainstreaming through SHGs				0			0			0	0	0	0
Storage loss minimization techniques				0			0			0	0	0	0
Value addition				0			0			0	0	0	0
Women empowerment				0			0			0	0	0	0
Location specific drudgery reduction technologies				0			0			0	0	0	0
Rural Crafts				0			0			0	0	0	0
Women and child care				0			0			0	0	0	0
Others				0			0			0	0	0	0
Total	**1**	**22**	**2**	**24**	**34**	**2**	**36**	**0**	**0**	**0**	**56**	**4**	**60**
VI. Agril. Engineering													
Farm machinery & its maintenance				0			0			0	0	0	0
Installation and maintenance of micro irrigation systems				0			0			0	0	0	0
Use of Plastics in farming practices				0			0			0	0	0	0
Production of small tools and implements				0			0			0	0	0	0
Repair and maintenance of farm machinery and implements				0			0			0	0	0	0
Small scale processing and value addition				0			0			0	0	0	0
Post Harvest Technology				0			0			0	0	0	0
Others				0			0			0	0	0	0
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
VII. Plant Protection													
Integrated Pest Management				0			0			0	0	0	0
Integrated Disease Management				0			0			0	0	0	0
Bio control of pests and diseases				0			0			0	0	0	0
Production of bio control agents and bio pesticides				0			0			0	0	0	0

Others				0			0			0	0	0	0
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
VIII. Fisheries													
Integrated fish farming				0			0			0	0	0	0
Carp breeding and hatchery management				0			0			0	0	0	0
Carp fry and fingerling rearing				0			0			0	0	0	0
Composite fish culture				0			0			0	0	0	0
Hatchery management and culture of freshwater prawn				0			0			0	0	0	0
Breeding and culture of ornamental fishes				0			0			0	0	0	0
Portable plastic carp hatchery				0			0			0	0	0	0
Pen culture of fish and prawn				0			0			0	0	0	0
Shrimp farming				0			0			0	0	0	0
Edible oyster farming				0			0			0	0	0	0
Pearl culture				0			0			0	0	0	0
Fish processing and value addition				0			0			0	0	0	0
Others				0			0			0	0	0	0
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
IX. Production of Input at site													
Seed Production				0			0			0	0	0	0
Planting material production				0			0			0	0	0	0
Bio agents production				0			0			0	0	0	0
Bio pesticides production				0			0			0	0	0	0
Bio fertilizer production				0			0			0	0	0	0
Vermi compost production				0			0			0	0	0	0
Organic manures production				0			0			0	0	0	0
Production of fry and fingerlings				0			0			0	0	0	0
Production of Bee colonies and wax sheets				0			0			0	0	0	0
Small tools and implements				0			0			0	0	0	0
Production of livestock feed and fodder				0			0			0	0	0	0
Production of Fish feed				0			0			0	0	0	0
Mushroom production				0			0			0	0	0	0
Apiculture				0			0			0	0	0	0
Others				0			0			0	0	0	0
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
X. Capacity Building and Group Dynamics													
Leadership development				0			0			0	0	0	0
Group dynamics	6	4	38	42	3	190	193	9	115	124	16	343	359
Formation and Management of SHGs	1	4	3	7	0	45	45	0	15	15	4	63	67
Mobilization of social capital				0			0			0	0	0	0
Entrepreneurial development of farmers/youths				0			0			0	0	0	0
WTO and IPR issues				0			0			0	0	0	0
Others (Market Linkage)	3	25	0	25	0	61	61	6	69	75	31	130	161

Others (Mobilization of Institutional Support)				0			0			0	0	0	0
Others (Crop Insurance)	2	0	41	41	0	50	50	0	6	6	0	97	97
Others (Institutional Credit Supply)				0			0			0	0	0	0
Others (Utilization of Govt. Scheme)				0			0			0	0	0	0
Total	**12**	**33**	**82**	**115**	**3**	**346**	**349**	**15**	**205**	**220**	**51**	**633**	**684**
XI. Agro forestry													
Production technologies				0			0			0	0	0	0
Nursery management				0			0			0	0	0	0
Integrated Farming Systems				0			0			0	0	0	0
Others				0			0			0	0	0	0
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
XII. Others (Pl. Specify) (Climate Resilience in Agriculture)	4	16	23	39	47	4	51	36	49	85	99	76	175
GRAND TOTAL	**29**	**166**	**191**	**357**	**158**	**465**	**623**	**62**	**392**	**454**	**386**	**1048**	**1434**

E) RURAL YOUTH (Off Campus)

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Nursery Management of Horticulture crops													
Training and pruning of orchards													
Protected cultivation of vegetable crops													
Commercial fruit production													
Integrated farming													
Seed production													
Production of organic inputs													
Planting material production													
Vermiculture													
Mushroom Production													
Beekeeping													
Sericulture													
Repair and maintenance of farm machinery and implements													
Value addition													
Small scale processing													
Post Harvest Technology													
Tailoring and Stitching													
Rural Crafts													
Production of quality animal products													
Dairying													
Sheep and goat rearing													
Quail farming													
Piggery													
Rabbit farming													
Poultry production													
Ornamental fisheries													
Composite fish culture													
Freshwater prawn culture													
Shrimp farming													
Pearl culture													
Cold water fisheries													
Fish harvest and processing technology													
Fry and fingerling rearing													
Others													
Total													

F) Extension Personnel (Off Campus)

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Productivity enhancement in field crops													
Integrated Pest Management													
Integrated Nutrient management													
Rejuvenation of old orchards													
Protected cultivation technology													
Production and use of organic inputs													
Care and maintenance of farm machinery and implements													
Gender mainstreaming through SHGs													
Formation and Management of SHGs													
Women and Childcare													
Low cost and nutrient efficient diet designing													
Group Dynamics and farmers organization													
Information networking among farmers													
Capacity building for ICT application													
Management in farm animals													
Livestock feed and fodder production													
Household food security													
Other (Preparation Techniques and Nursery Raising)													
Other (Production and Management Technology)													
Other (Yield Increment of Vegetables)													
Total													

G) Consolidated table (ON and OFF Campus)

i. Farmers & Farm Women

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
I. Crop Production													
Weed Management	0	0	0	0	0	0	0	0	0	0	0	0	0
Resource Conservation Technologies	3	50	17	67	17	27	44	1	8	9	68	52	120
Cropping Systems	0	0	0	0	0	0	0	0	0	0	0	0	0
Crop Diversification	2	47	2	49	17	1	18	6	0	6	70	3	73
Integrated Farming	0	0	0	0	0	0	0	0	0	0	0	0	0
Micro irrigation/irrigation	0	0	0	0	0	0	0	0	0	0	0	0	0
Seed production	1	25	5	30	2	5	7	5	0	5	32	10	42
Nursery management	0	0	0	0	0	0	0	0	0	0	0	0	0
Integrated Crop Management	0	0	0	0	0	0	0	0	0	0	0	0	0
Soil & water conservation	0	0	0	0	0	0	0	0	0	0	0	0	0
Integrated nutrient Management	0	0	0	0	0	0	0	0	0	0	0	0	0
Production of organic inputs	0	0	0	0	0	0	0	0	0	0	0	0	0
Others (Production Technology on Millets)	1	17	15	32	4	15	19	4	5	9	25	35	60
Others (Seed Production Technology on Millets)	1	25	8	33	5	0	5	3	0	3	33	8	41
Total	**8**	**164**	**47**	**211**	**45**	**48**	**93**	**19**	**13**	**32**	**228**	**108**	**336**
II. Horticulture													
a) Vegetable Crops													
Production of low volume and high value crops	0	0	0	0	0	0	0	0	0	0	0	0	0
Off season vegetables	0	0	0	0	0	0	0	0	0	0	0	0	0
Nursery raising	0	0	0	0	0	0	0	0	0	0	0	0	0
Exotic vegetables	1	3	0	3	4	0	4	0	0	0	7	0	7
Export potential vegetables	0	0	0	0	0	0	0	0	0	0	0	0	0
Grading and standardization	0	0	0	0	0	0	0	0	0	0	0	0	0
Protective cultivation	0	0	0	0	0	0	0	0	0	0	0	0	0
Others	1	0	0	0	17	17	34	19	26	45	36	43	79
Total (a)	**2**	**3**	**0**	**3**	**21**	**17**	**38**	**19**	**26**	**45**	**43**	**43**	**86**
b) Fruits													
Training and Pruning	0	0	0	0	0	0	0	0	0	0	0	0	0
Layout and Management of Orchards	1	4	1	5	9	11	20	5	0	5	18	12	30
Cultivation of Fruit	0	0	0	0	0	0	0	0	0	0	0	0	0
Management of young plants/orchards	0	0	0	0	0	0	0	0	0	0	0	0	0
Rejuvenation of old orchards	0	0	0	0	0	0	0	0	0	0	0	0	0
Export potential fruits	0	0	0	0	0	0	0	0	0	0	0	0	0
Micro irrigation systems of orchards	0	0	0	0	0	0	0	0	0	0	0	0	0
Plant propagation techniques	0	0	0	0	0	0	0	0	0	0	0	0	0

Others	0	0	0	0	0	0	0	0	0	0	0	0	0
Total (b)	**1**	**4**	**1**	**5**	**9**	**11**	**20**	**5**	**0**	**5**	**18**	**12**	**30**
c) Ornamental Plants													
Nursery Management	0	0	0	0	0	0	0	0	0	0	0	0	0
Management of potted plants	0	0	0	0	0	0	0	0	0	0	0	0	0
Export potential of ornamental plants	0	0	0	0	0	0	0	0	0	0	0	0	0
Propagation techniques of Ornamental Plants	0	0	0	0	0	0	0	0	0	0	0	0	0
Others	0	0	0	0	0	0	0	0	0	0	0	0	0
Total (c)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
d) Plantation crops													
Production and Management technology	0	0	0	0	0	0	0	0	0	0	0	0	0
Processing and value addition	0	0	0	0	0	0	0	0	0	0	0	0	0
Others	0	0	0	0	0	0	0	0	0	0	0	0	0
Total (d)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
e) Tuber crops													
Production and Management technology	0	0	0	0	0	0	0	0	0	0	0	0	0
Processing and value addition	0	0	0	0	0	0	0	0	0	0	0	0	0
Others	0	0	0	0	0	0	0	0	0	0	0	0	0
Total (e)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
f) Spices													
Production and Management technology	0	0	0	0	0	0	0	0	0	0	0	0	0
Processing and value addition	0	0	0	0	0	0	0	0	0	0	0	0	0
Others	0	0	0	0	0	0	0	0	0	0	0	0	0
Total (f)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
g) Medicinal and Aromatic Plants													
Nursery management	0	0	0	0	0	0	0	0	0	0	0	0	0
Production and management technology	1	0	4	4	0	0	0	0	52	52	0	56	56
Post harvest technology and value addition	0	0	0	0	0	0	0	0	0	0	0	0	0
Others	0	0	0	0	0	0	0	0	0	0	0	0	0
Total (g)	**1**	**0**	**4**	**4**	**0**	**0**	**0**	**0**	**52**	**52**	**0**	**56**	**56**
Total(a-g)	**4**	**7**	**5**	**12**	**30**	**28**	**58**	**24**	**78**	**102**	**61**	**111**	**172**
III. Soil Health and Fertility Management													
Soil fertility management	2	36	5	41	8	3	11	3	0	3	47	8	55
Integrated water management	0	0	0	0	0	0	0	0	0	0	0	0	0
Integrated Nutrient Management	0	0	0	0	0	0	0	0	0	0	0	0	0
Production and use of organic inputs	0	0	0	0	0	0	0	0	0	0	0	0	0
Management of Problematic soils	0	0	0	0	0	0	0	0	0	0	0	0	0
Micro nutrient deficiency in crops	0	0	0	0	0	0	0	0	0	0	0	0	0
Nutrient Use Efficiency	0	0	0	0	0	0	0	0	0	0	0	0	0
Balance Use of fertilizer	3	33	6	39	6	12	18	3	1	4	42	19	61
Soil & water testing	0	0	0	0	0	0	0	0	0	0	0	0	0
others	0	0	0	0	0	0	0	0	0	0	0	0	0

Total	**5**	**69**	**11**	**80**	**14**	**15**	**29**	**6**	**1**	**7**	**89**	**27**	**116**
IV. Livestock Production and Management													
Dairy Management	2	31	19	50	24	0	24	0	0	0	55	19	74
Poultry Management	3	0	28	28	0	29	29	6	34	40	6	91	97
Piggery Management	2	2	0	2	0	0	0	9	56	65	11	56	67
Rabbit Management	0	0	0	0	0	0	0	0	0	0	0	0	0
Animal Nutrition Management	1	4	0	4	21	25	46	0	0	0	25	25	50
Disease Management	5	58	42	100	21	42	63	8	38	46	87	122	209
Feed & fodder technologies	1	3	11	14	6	47	53	0	7	7	9	65	74
Production of quality animal products	0	0	0	0	0	0	0	0	0	0	0	0	0
Others (Sheep Farming)	1	1	7	8	8	14	22	0	1	1	9	22	31
Others (Integrated Farming)	1	0	12	12	0	32	32	0	15	15	0	59	59
Total	**16**	**99**	**119**	**218**	**80**	**189**	**269**	**23**	**151**	**174**	**202**	**459**	**661**
V. Home Science/Women empowerment													
Household food security by kitchen gardening and nutrition gardening	1	22	2	24	34	2	36	0	0	0	56	4	60
Design and development of low/minimum cost diet	0	0	0	0	0	0	0	0	0	0	0	0	0
Designing and development for high nutrient efficiency diet	0	0	0	0	0	0	0	0	0	0	0	0	0
Minimization of nutrient loss in processing	0	0	0	0	0	0	0	0	0	0	0	0	0
Processing & cooking	0	0	0	0	0	0	0	0	0	0	0	0	0
Gender mainstreaming through SHGs	0	0	0	0	0	0	0	0	0	0	0	0	0
Storage loss minimization techniques	0	0	0	0	0	0	0	0	0	0	0	0	0
Value addition	0	0	0	0	0	0	0	0	0	0	0	0	0
Women empowerment	0	0	0	0	0	0	0	0	0	0	0	0	0
Location specific drudgery reduction technologies	0	0	0	0	0	0	0	0	0	0	0	0	0
Rural Crafts	0	0	0	0	0	0	0	0	0	0	0	0	0
Women and child care	0	0	0	0	0	0	0	0	0	0	0	0	0
Others	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	**1**	**22**	**2**	**24**	**34**	**2**	**36**	**0**	**0**	**0**	**56**	**4**	**60**
VI. Agril. Engineering													
Farm machinery & its maintenance	0	0	0	0	0	0	0	0	0	0	0	0	0
Installation and maintenance of micro irrigation systems	0	0	0	0	0	0	0	0	0	0	0	0	0
Use of Plastics in farming practices	0	0	0	0	0	0	0	0	0	0	0	0	0
Production of small tools and implements	0	0	0	0	0	0	0	0	0	0	0	0	0
Repair and maintenance of farm machinery and implements	0	0	0	0	0	0	0	0	0	0	0	0	0
Small scale processing and value addition	0	0	0	0	0	0	0	0	0	0	0	0	0
Post Harvest Technology	0	0	0	0	0	0	0	0	0	0	0	0	0
Others	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
VII. Plant Protection													

Integrated Pest Management	0	0	0	0	0	0	0	0	0	0	0	0	0
Integrated Disease Management	0	0	0	0	0	0	0	0	0	0	0	0	0
Bio control of pests and diseases	0	0	0	0	0	0	0	0	0	0	0	0	0
Production of bio control agents and bio pesticides	1	7	0	7	15	0	15	8	0	8	30	0	30
Others	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	**1**	**7**	**0**	**7**	**15**	**0**	**15**	**8**	**0**	**8**	**30**	**0**	**30**
VIII. Fisheries													
Integrated fish farming	0	0	0	0	0	0	0	0	0	0	0	0	0
Carp breeding and hatchery management	0	0	0	0	0	0	0	0	0	0	0	0	0
Carp fry and fingerling rearing	0	0	0	0	0	0	0	0	0	0	0	0	0
Composite fish culture	0	0	0	0	0	0	0	0	0	0	0	0	0
Hatchery management and culture of freshwater prawn	0	0	0	0	0	0	0	0	0	0	0	0	0
Breeding and culture of ornamental fishes	0	0	0	0	0	0	0	0	0	0	0	0	0
Portable plastic carp hatchery	0	0	0	0	0	0	0	0	0	0	0	0	0
Pen culture of fish and prawn	0	0	0	0	0	0	0	0	0	0	0	0	0
Shrimp farming	0	0	0	0	0	0	0	0	0	0	0	0	0
Edible oyster farming	0	0	0	0	0	0	0	0	0	0	0	0	0
Pearl culture	0	0	0	0	0	0	0	0	0	0	0	0	0
Fish processing and value addition	0	0	0	0	0	0	0	0	0	0	0	0	0
Others	1	0	0	0	0	0	0	14	16	30	14	16	30
Total	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**14**	**16**	**30**	**14**	**16**	**30**
IX. Production of Input at site													
Seed Production	0	0	0	0	0	0	0	0	0	0	0	0	0
Planting material production	0	0	0	0	0	0	0	0	0	0	0	0	0
Bio agents production	0	0	0	0	0	0	0	0	0	0	0	0	0
Bio pesticides production	0	0	0	0	0	0	0	0	0	0	0	0	0
Bio fertilizer production	0	0	0	0	0	0	0	0	0	0	0	0	0
Vermi compost production	1	10	0	10	10	0	10	0	0	0	20	0	20
Organic manures production	0	0	0	0	0	0	0	0	0	0	0	0	0
Production of fry and fingerlings	0	0	0	0	0	0	0	0	0	0	0	0	0
Production of Bee0colonies and wax sheets	0	0	0	0	0	0	0	0	0	0	0	0	0
Small tools and implements	0	0	0	0	0	0	0	0	0	0	0	0	0
Production of livestock feed and fodder	0	0	0	0	0	0	0	0	0	0	0	0	0
Production of Fish feed	0	0	0	0	0	0	0	0	0	0	0	0	0
Mushroom production	0	0	0	0	0	0	0	0	0	0	0	0	0
Apiculture	0	0	0	0	0	0	0	0	0	0	0	0	0
Others	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	**1**	**10**	**0**	**10**	**10**	**0**	**10**	**0**	**0**	**0**	**20**	**0**	**20**
X. Capacity Building and Group Dynamics													
Leadership development	0	0	0	0	0	0	0	0	0	0	0	0	0
Group dynamics	6	4	38	42	3	190	193	9	115	124	16	343	359
Formation and Management of SHGs	1	4	3	7	0	45	45	0	15	15	4	63	67

Mobilization of social capital	0	0	0	0	0	0	0	0	0	0	0	0	0
Entrepreneurial development of farmers/youths	0	0	0	0	0	0	0	0	0	0	0	0	0
WTO and IPR issues	0	0	0	0	0	0	0	0	0	0	0	0	0
Others (Market Linkage)	3	25	0	25	0	61	61	6	69	75	31	130	161
Others (Mobilization of Institutional Support)	0	0	0	0	0	0	0	0	0	0	0	0	0
Others (Crop Insurance)	2	0	41	41	0	50	50	0	6	6	0	97	97
Others (Institutional Credit Supply)	0	0	0	0	0	0	0	0	0	0	0	0	0
Others (Utilization of Govt. Scheme)	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	**12**	**33**	**82**	**115**	**3**	**346**	**349**	**15**	**205**	**220**	**51**	**633**	**684**
XI. Agro forestry													
Production technologies	1	1	3	4	6	16	22	2	3	5	9	22	31
Nursery management	0	0	0	0	0	0	0	0	0	0	0	0	0
Integrated Farming Systems	0	0	0	0	0	0	0	0	0	0	0	0	0
Others	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	**1**	**1**	**3**	**4**	**6**	**16**	**22**	**2**	**3**	**5**	**9**	**22**	**31**
XII. Others (Pl. Specify) (Climate Resilience in Agriculture)	5	50	24	74	63	5	68	37	49	86	150	78	228
GRAND TOTAL	**55**	**462**	**293**	**755**	**300**	**649**	**949**	**148**	**516**	**664**	**910**	**1458**	**2368**

ii. RURAL YOUTH (On and Off Campus)

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Nursery Management of Horticulture crops	0	0	0	0	0	0	0	0	0	0	0	0	0
Training and pruning of orchards	0	0	0	0	0	0	0	0	0	0	0	0	0
Protected cultivation of vegetable crops	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial fruit production	0	0	0	0	0	0	0	0	0	0	0	0	0
Integrated farming	0	0	0	0	0	0	0	0	0	0	0	0	0
Seed production	0	0	0	0	0	0	0	0	0	0	0	0	0
Production of organic inputs	1	13	2	15	0	0	0	0	0	0	13	2	15
Planting material production	0	0	0	0	0	0	0	0	0	0	0	0	0
Vermiculture	0	0	0	0	0	0	0	0	0	0	0	0	0
Mushroom Production	0	0	0	0	0	0	0	0	0	0	0	0	0
Beekeeping	1	12	0	12	2	0	2	1	0	1	15	0	15
Sericulture	0	0	0	0	0	0	0	0	0	0	0	0	0
Repair and maintenance of farm machinery and implements	0	0	0	0	0	0	0	0	0	0	0	0	0
Value addition	0	0	0	0	0	0	0	0	0	0	0	0	0
Small scale processing	0	0	0	0	0	0	0	0	0	0	0	0	0
Post Harvest Technology	0	0	0	0	0	0	0	0	0	0	0	0	0
Tailoring and Stitching	0	0	0	0	0	0	0	0	0	0	0	0	0
Rural Crafts	0	0	0	0	0	0	0	0	0	0	0	0	0
Production of quality animal products	0	0	0	0	0	0	0	0	0	0	0	0	0
Dairying	0	0	0	0	0	0	0	0	0	0	0	0	0
Sheep and goat rearing	3	16	7	23	35	16	51	8	4	12	59	27	86
Quail farming	0	0	0	0	0	0	0	0	0	0	0	0	0
Piggery	0	0	0	0	0	0	0	0	0	0	0	0	0
Rabbit farming	0	0	0	0	0	0	0	0	0	0	0	0	0
Poultry production	3	11	1	12	1	16	17	4	2	6	16	19	35
Ornamental fisheries	0	0	0	0	0	0	0	0	0	0	0	0	0
Composite fish culture	0	0	0	0	0	0	0	0	0	0	0	0	0
Freshwater prawn culture	0	0	0	0	0	0	0	0	0	0	0	0	0
Shrimp farming	0	0	0	0	0	0	0	0	0	0	0	0	0
Pearl culture	0	0	0	0	0	0	0	0	0	0	0	0	0
Cold water fisheries	0	0	0	0	0	0	0	0	0	0	0	0	0
Fish harvest and processing technology	0	0	0	0	0	0	0	0	0	0	0	0	0
Fry and fingerling rearing	0	0	0	0	0	0	0	0	0	0	0	0	0
Others	1	24	15	39	3	4	7	0	1	1	27	20	47
Total	**9**	**76**	**25**	**101**	**41**	**36**	**77**	**13**	**7**	**20**	**130**	**68**	**198**

iii. Extension Personnel (On and Off Campus)

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Productivity enhancement in field crops	1	25	3	28	9	0	9	0	0	0	34	3	37
Integrated Pest Management	0	0	0	0	0	0	0	0	0	0	0	0	0
Integrated Nutrient management	0	0	0	0	0	0	0	0	0	0	0	0	0
Rejuvenation of old orchards	0	0	0	0	0	0	0	0	0	0	0	0	0
Protected cultivation technology	0	0	0	0	0	0	0	0	0	0	0	0	0
Production and use of organic inputs	0	0	0	0	0	0	0	0	0	0	0	0	0
Care and maintenance of farm machinery and implements	0	0	0	0	0	0	0	0	0	0	0	0	0
Gender mainstreaming through SHGs	0	0	0	0	0	0	0	0	0	0	0	0	0
Formation and Management of SHGs	0	0	0	0	0	0	0	0	0	0	0	0	0
Women and Child care	0	0	0	0	0	0	0	0	0	0	0	0	0
Low cost and nutrient efficient diet designing	0	0	0	0	0	0	0	0	0	0	0	0	0
Group Dynamics and farmers organization	0	0	0	0	0	0	0	0	0	0	0	0	0
Information networking among farmers	0	0	0	0	0	0	0	0	0	0	0	0	0
Capacity building for ICT application	0	0	0	0	0	0	0	0	0	0	0	0	0
Management in farm animals	0	0	0	0	0	0	0	0	0	0	0	0	0
Livestock feed and fodder production	0	0	0	0	0	0	0	0	0	0	0	0	0
Household food security	0	0	0	0	0	0	0	0	0	0	0	0	0
Other (Preparation Techniques and Nursery Raising)	0	0	0	0	0	0	0	0	0	0	0	0	0
Other (Production and Management Technology)	0	0	0	0	0	0	0	0	0	0	0	0	0
Other (Yield Increment of Vegetables)	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	**1**	**25**	**3**	**28**	**9**	**0**	**9**	**0**	**0**	**0**	**34**	**3**	**37**

H) Vocational training programmes for Rural Youth

a) Details of training programmes for Rural Youth

Crop / Enterprise	Identified Thrust Area	Training title*	Duration (days)	No. of Participants			Self-employed after training			Number of persons employed else where
				M	F	T	Type of units	Number of units	Number of persons employed	
Bee Keeping Unit	Beekeeping	Bee keeping (STRY Programme)	07	15	00	15	Bee Keeping Unit	06	09	06
Bio-Input Production	Production of Organic Inputs	Production of Organic Inputs and Soil Testing	04	13	02	15	Organic Input Production	07	10	05
Commercial Broiler and Layer Farming	Poultry Production	Commercial Broiler and Layer Farming	08	08	09	17	Poultry Broiler Unit	07	07	10
Commercial Broiler and Layer Farming	Poultry Production	Commercial Broiler and Layer Farming	08	08	00	08	Poultry Broiler Unit	03	03	05
Scientific Goatery Management	Goat Farming	Scientific Goatery Management	12	12	00	12	Goat Farms	10	10	02
Commercial Broiler and Layer Farming	Poultry Production	Commercial Broiler and Layer Production	07	00	10	10	Poultry Broiler Unit	05	05	05
Scientific Goatery Management	Goat Farming	Scientific Goatery Management	05	06	09	15	Goat Farms	15	15	00
Scientific Goatery Management	Goat Farming	Scientific Goatery Management	05	41	18	59	Goat Farms	59	59	00

***Training title should specify the major technology /skill transferred**

b) Details of participation

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Crop production and management													
Commercial floriculture													
Commercial fruit production													
Commercial vegetable production													
Integrated crop management													
Organic farming													
Other (Production of Organic Inputs)	01	13	02	15	00	00	00	00	00	00	13	02	15
Total	**01**	**13**	**02**	**15**	**00**	**00**	**00**	**00**	**00**	**00**	**13**	**02**	**15**
Post harvest technology and value addition													
Value addition													
Other													
Total													
Livestock and fisheries													
Dairy farming													
Composite fish culture													
Sheep and goat rearing	03	16	07	23	35	16	51	08	04	12	59	27	86
Piggery													
Poultry farming	03	11	01	12	01	16	17	04	02	06	16	19	35
Other													
Total	**06**	**27**	**08**	**35**	**36**	**32**	**68**	**12**	**06**	**18**	**75**	**46**	**121**
Income generation activities													
Vermicomposting	01	10	00	10	10	00	10	00	00	00	20	00	20
Production of bioagents, biopesticides,													
biofertilizers etc.													
Repair and maintenance of farm machinery & implements													
Rural Crafts													
Seed production													
Sericulture													
Mushroom cultivation													
Nursery, grafting etc.													
Tailoring, stitching, embroidery, dying etc.													
Agril. Para-workers, para-vet training													
Other (Bee keeping Units)	01	12	00	12	02	00	02	01	00	01	15	00	15
Total	**02**	**22**	**00**	**22**	**12**	**00**	**12**	**01**	**00**	**01**	**35**	**00**	**35**
Agricultural Extension													
Capacity building and group dynamics													
Other													
Total													
Grand Total	**09**	**62**	**10**	**72**	**48**	**32**	**80**	**13**	**06**	**19**	**123**	**48**	**171**

I) Sponsored Training Programmes

a) Details of Sponsored Training Programme

Sl. No.	Title	Thematic area	Month	Duration (days)	Client PF/RY/EF	No. of courses	No. of participants	Sponsoring Agency
01.	Practical- Different propagation techniques in horticultural crops.	Propagation of horticultural crops	JAN	1	EF	1	30	self
02.	Pests of potato and their management practices.	Pest Management measures	JAN	1	EF	1	30	self
03.	Practical- Different propagation techniques in horticultural crops.	Propagation of horticultural crops	JAN	1	EF	1	36	self
04.	Pests of potato and their management practices.	Pest Management measures	JAN	1	EF	1	36	self
05.	Pests and diseases of solanaceous vegetables and their management.	Plant Protection technologies	JAN	1	EF	1	40	self
06.	Different ongoing schemes in agriculture for farmers.	Features of various current schemes	JAN	1	EF	1	40	self
07.	Pests and diseases of solanaceous vegetables and their management	Plant Protection technologies	JAN	1	EF	1	35	self
08.	Different ongoing schemes in agriculture for farmers.	Features of various current schemes					35	
09.	Irrigation scheduling and critical stages of crop for irrigation.	Water management	JAN	1	EF	1	38	self
10.	Use of Agri Drone in agricultural field as agricultural mechanization.	Modern technologies in agriculture	JAN	1	EF	1	38	self
11.	Irrigation scheduling and critical stages of crop for irrigation.	Water management	JAN	1	EF	1	38	self
12.	Use of Agri Drone in agricultural field as agricultural mechanization.	Modern technologies in agriculture	JAN	1	EF	1	38	self
13.	Production technology of medicinal & aromatic plants.	Ornamental Plants	JAN	1	EF	1	39	self
14.	Production technology of medicinal & aromatic plants.	Ornamental Plants	JAN	1	EF	1	39	self
15.	Diseases & pests of winter vegetables and their management.	Plant Protection measures	JAN	1	EF	1	33	self
16.	Diseases and pests of cereal crops	Plant Protection	JAN	1	EF	1	32	self
17.	Diseases & pests of winter vegetables and their management.	Plant Protection measures	JAN	1	EF	1	34	self
18.	Diseases and pests of cereal crops	Plant Protection	JAN	1	EF	1	34	self
19.	Practical- Intercultural operation in chickpea field.	Commercial production of pulses	FEB	1	EF	1	39	self
20.	Introduction to Agro-meteorology.	other	FEB	1	EF	1	39	self
21.	Practical- Intercultural operation in chick pea field.	Commercial production of pulses	FEB	1	EF	1	39	self
22.	Introduction to Agro-meteorology.	other	FEB	1	EF	1	39	self
23.	Practical- Identification of medicinal & aromatic plants.	Ornamental plants	FEB	1	EF	1	39	self
24.	Remote sensing and various meteorological instruments and their uses.	other	FEB	1	EF	1	39	self
25.	Practical- Identification of medicinal & aromatic plants.	Ornamental plants	FEB	1	EF	1	37	self
26.	Remote sensing and various meteorological instruments and their uses.	other	FEB	1	EF	1	37	self
27.	Exposure Visit to Garden Section, Visva-Bharati.	Horticulture	MAR	1	EF	1	40	self
28.	Exposure Visit to Garden Section, Visva-Bharati.	Horticulture	MAR	1	EF	1	38	self
29.	Pest: A brief idea and its classification.	Pest management	MAR	1	EF	1	38	self
30.	Basic principles of irrigation and quality of irrigation water.	Methods of Water management	MAR	1	EF	1	39	self
31.	Pest: A brief idea and its classification.	Pest management	MAR	1	EF	1	38	self
32.	Basic principles of irrigation and quality of irrigation water.	Methods of Water management	MAR	1	EF	1	38	self

33.	Practical- Layout and preparation of plots for medicinal garden.	Ornamental plants	MAR	1	EF	1	38	self
34.	Production technology of summer green gram and black gram.	Increasing production and productivity of crops	MAR	1	EF	1	38	self
35.	Production technology of summer green gram and black gram.	Increasing production and productivity of crops	MAR	1	EF	1	39	self
36.	Practical- Layout and preparation of plots for medicinal garden.	Ornamental plants	MAR	1	EF	1	39	self
37.	Insect Morphology.	Morphological description of insect	MAR	1	EF	1	40	self
38.	Integrated Pest Management- Idea and components.	IPM	MAR	1	EF	1	40	self
39.	Insect Morphology.	Morphological description of insect	MAR	1	EF	1	40	self
40.	Integrated Pest Management- Idea and components.	IPM	MAR	1	EF	1	40	self
41.	General idea about weeds and its classification.	Weed management	APR	1	EF	1	36	self
42.	Irrigation scheduling and critical stages of different crops for irrigation.	Methods of Water management	APR	1	EF	1	36	self
43.	General idea about weeds and its classification.	Weed management	APR	1	EF	1	37	self
44.	Irrigation scheduling and critical stages of different crops for irrigation.	Methods of Water management	APR	1	EF	1	38	self
45.	Calculation of fertilizer requirement for different crops.	Soil health and fertility management	APR	1	EF	1	38	self
46.	Practical demonstration of drip irrigation system.	Methods of Water management	APR	1	EF	1	38	self
47.	Calculation of fertilizer requirement for different crops.	Soil health and fertility management	APR	1	EF	1	40	self
48.	Practical demonstration of drip irrigation system.	Methods of Water management	APR	1	EF	1	40	self
49.	Production technology of millets.	Increasing production and productivity of crops	APR	1	EF	1	36	self
50.	Crop-specific weeds and their classification.	Weed management	APR	1	EF	1	36	self
51.	Production technology of millets.	Increasing production and productivity of crops	APR	1	EF	1	35	self
52.	Crop-specific weeds and their classification.	Weed management	APR	1	EF	1	35	self
53.	Packages and practices of cultivation of Mango.	Value addition	APR	1	EF	1	37	self
54.	A Brief idea about Beekeeping.	other	APR	1	EF	1	37	self
55.	A Brief idea about Beekeeping.	Other	APR	1	EF	1	38	self
56.	Packages and practices of cultivation of Mango.	Value addition	APR	1	EF	1	38	self
57.	Safe use of pesticides.	Pest management techniques	MAY	1	EF	1	40	self
58.	Practical: Soil sample collection for soil testing	Soil health and fertility management	MAY	1	EF	1	40	self
59.	Safe use of pesticides.	Pest management techniques	MAY	1	EF	1	39	self
60.	Practical: Soil sample collection for soil testing	Soil health and fertility management	MAY	1	EF	1	39	self
61.	Introduction to Soil Science and properties of soil.	Soil health and fertility management	MAY	1	EF	1	38	self
62.	Farm Mechanization and implements and their uses.	Farm machinery, tools and implements	MAY	1	EF	1	38	self
63.	Introduction to Soil Science and properties of soil.	Soil health and fertility management	MAY	1	EF	1	37	self
64.	Farm Mechanization and implements and their uses.	Farm machinery, tools and implements	MAY	1	EF	1	37	self
65.	Physical and chemical properties of soil.	Soil health and fertility management	MAY	1	EF	1	36	self
66.	Kisan Credit Card and crop insurance.	Extension activities	MAY	1	EF	1	36	self

67.	Physical and chemical properties of soil.	Soil health and fertility management	MAY	1	EF	1	33	self
68.	Kisan Credit Card and crop insurance.	Extension activities	MAY	1	EF	1	33	self
69.	Exposure Visit to Meteorological Office, IMD, Sriniketan.	Other	MAY	1	EF	1	37	self
70.	Exposure Visit to Meteorological Office, IMD, Sriniketan.	Other	MAY	1	EF	1	39	self
71.	Different ongoing schemes of agriculture for farmers.	Current features of agricultural schemes	MAY	1	EF	1	37	self
72.	Production technology of Kharif vegetables.	Increasing production and productivity of crops	MAY	1	EF	1	37	self
73.	Different ongoing schemes of agriculture for farmers.	Current features of agricultural schemes	MAY	1	EF	1	38	self
74.	Production technology of Kharif vegetables.	Increasing production and productivity of crops	MAY	1	EF	1	38	self
75.	Production technology of Kharif vegetables.	Commercial production of vegetables	MAY	1	EF	1	39	self
76.	Integrated Nutrient Management (INM).	Nutrient managent	MAY	1	EF	1	39	self
77.	Production technology of Kharif vegetables.	Commercial production of vegetables	MAY	1	EF	1	38	self
78.	Integrated Nutrient Management (INM).	Nutrient managent	MAY	1	EF	1	38	self
79.	Seed Certification.	Other	JUN	1	EF	1	38	self
80.	Seed Certification.	Other	JUN	1	EF	1	39	self
81.	Problematic soils and their management.	Soil health and fertility management	JUN	1	EF	1	37	self
82.	Production technology of Vermicompost and multiplication of Azolla.	Production of Inputs at site	JUN	1	EF	1	38	self
83.	Problematic soils and their management.	Soil health and fertility management	JUN	1	EF	1	38	self
84.	Production technology of Vermicompost and multiplication of Azolla.	Production of Inputs at site	JUN	1	EF	1	38	self
85.	Direct Seed Technologies of Rice.	Modern Crop Production technology	JUN	1	EF	1	38	self
86.	IPM of kharif vegetables.	IPM	JUN	1	EF	1	37	self
87.	Direct Seed Technologies of Rice.	Modern Crop Production technology	JUN	1	EF	1	38	self
88.	IPM of kharif vegetables.	Other	JUN	1	EF	1	38	self
89.	IPM of kharif rice.	IPM	JUN	1	EF	1	36	self
90.	Production and use of Biofertilizers.	Production of Inputs at site	JUN	1	EF	1	36	self
91.	IPM of kharif rice.	IPM	JUN	1	EF	1	36	self
92.	Production and use of Biofertilizers.	Production of Inputs at site	JUN	1	EF	1	36	self
93.	Improved cultivation practices of kharif rice.	Increasing production and productivity of crops	JUL	1	EF	1	34	self
94.	Brief idea about New-generation pesticides.	Pest management	JUL	1	EF	1	32	self
95.	Improved cultivation practices of kharif rice.	Increasing production and productivity of crops	JUL	1	EF	1	39	self
96.	Brief idea about New-generation pesticides.	Pest management	JUL	1	EF	1	36	self
97.	Practical- Identification of different weeds in Crop field.	Idea about various weeds	JUL	1	EF	1	39	self
98.	Practical- Identification of different weeds in Crop field.	Idea about various weeds	JUL	1	EF	1	37	self
99.	SRI Method of Rice Cultivation	Modern Crop Production technology	JUL	1	EF	1	37	self
100.	Numericals on Calculation of complex fertilizers for different crops	Other	JUL	1	EF	1	37	self
101.	SRI Method of Rice Cultivation	Modern Crop Production technology	JUL	1	EF	1	37	self

102.	Numerical on Calculation of complex fertilizers for different crops	Other	JUL	1	EF	1	37	self
103.	Propagation techniques of different horticultural crops.	Propagation of horticultural crops	JUL	1	EF	1	37	self
104.	Weed problems and different herbicides.	Weed management	JUL	1	EF	1	34	self
105.	Propagation Techniques of different horticultural crops.	Propagation of horticultural crops	AUG	1	EF	1	39	self
106.	Weed problems and different herbicides.	Weed management	AUG	1	EF	1	39	self
107.	Different instruments and equipment used in Soil Testing Laboratory for soil sample analysis & preparation of soil health card.	Soil testing activities	AUG	1	EF	1	36	self
108.	Mode of action of herbicides, selectivity of herbicides and herbicide resistance.	Weed management	AUG	1	EF	1	36	self
109.	Different instruments and equipment used in Soil Testing Laboratory for soil sample analysis & preparation of soil health card.	Soil testing activities	AUG	1	EF	1	34	self
110.	Mode of action of herbicides, selectivity of herbicides and herbicide resistance.	Weed management	AUG	1	EF	1	35	self
111.	Practical- Different propagation techniques of different horticultural crops.	Propagation of horticultural crops	AUG	1	EF	1	35	self
112.	Diseases of kharif rice and their management.	Disease management	AUG	1	EF	1	35	self
113.	Diseases of kharif rice and their management.	Disease management	AUG	1	EF	1	36	self
114.	Practical- Different propagation techniques of different horticultural crops.	Propagation of horticultural crops	AUG	1	EF	1	36	self
115.	Celebration of Parthenium Awareness Week.	Other	AUG	1	EF	1	23	self
116.	Nutrient deficiency symptoms and their management.	Nutrient management	AUG	1	EF	1	23	self
117.	Celebration of Parthenium Awareness Week.	Other	AUG	1	EF	1	34	self
118.	Nutrient deficiency symptoms and their management.	Nutrient management	AUG	1	EF	1	34	self
119.	Preparation and management of Nursery of vegetable crops.	Nursery management	AUG	1	EF	1	39	self
120.	Identification of pests and diseases of different fruit crops.	Protection technologies for fruits	AUG	1	EF	1	39	self
121.	Preparation and management of Nursery of vegetable crops.	Nursery management	AUG	1	EF	1	39	self
122.	Identification of pests and diseases of different fruit crops.	Protection technologies for fruits	AUG	1	EF	1	39	self
123.	Production technology of Guava & Litchi.	Commercial production of fruits	SEP	1	EF	1	38	self
124.	Practical- Multiplication of Azolla.	Production of Inputs at site	SEP	1	EF	1	38	self
125	Practical- Multiplication of Azolla.	Production of Inputs at site	SEP	1	EF	1	40	self
126.	Production technology of Guava & Litchi.	Commercial production of fruits	SEP	1	EF	1	40	self
127.	Practical- Identification of different insect-pests, diseases and weeds in rice field.	Crop protection techniques	SEP	1	EF	1	39	self
128.	Practical- Identification of different insect-pests, diseases and weeds in rice field.	Crop protection techniques	SEP	1	EF	1	37	self
129.	Production technology of kharif maize.	Commercial production of cereal crops	SEP	1	EF	1	39	self
130.	Diseases and insect-pests of maize and their management practices.	Crop protection techniques	SEP	1	EF	1	39	self

131.	Diseases and insect-pests of maize and their management practices.	Crop protection techniques	SEP	1	EF	1	36	self
132.	Production technology of kharif maize.	Commercial production of cereal crops	SEP	1	EF	1	36	self
133.	Improved cultivation techniques of lentil & Chickpea.	Increasing production and productivity of crops	SEP	1	EF	1	36	self
134	Practical- Production technology of Vermicompost.	Production of Inputs at site	SEP	1	EF	1	36	self
135.	Improved cultivation techniques of lentil & Chickpea.	Increasing production and productivity of crops	SEP	1	EF	1	33	self
136.	Demonstration of Agri-Drone for spraying in paddy field.	Modern techniques in crop protection	SEP	1	EF	1	34	self
137.	Production technology of Mustard & Rapeseed.	Commercial production of Oilseeds	OCT	1	EF	1	39	self
138.	Major flagship schemes of Central/State Govt. related to development in agriculture.	Govt. initiatives in agricultural development	OCT	1	EF	1	39	self
139.	Production technology of Mustard & Rapeseed.	Commercial production of Oilseeds	OCT	1	EF	1	35	self
140.	Major flagship schemes of Central/State Govt. related to development in agriculture.	Govt. initiatives in agricultural development	OCT	1	EF	1	35	self
141.	Exposure Visit to Sericulture Composite Unit, Sriniketan, Birbhum	Sericulture technology	OCT	1	EF	1	36	self
142.	Exposure Visit to Sericulture Composite Unit, Sriniketan, Birbhum	Sericulture technology	OCT	1	EF	1	40	self
143.	A brief idea about Hydroponics and its application.	Modern Techniques in agriculture	OCT	1	EF	1	37	self
144.	Practical- Preparation of Vermicompost.	Production of Inputs at site	OCT	1	EF	1	37	self
145.	A brief idea about Hydroponics and its application.	Modern Techniques in agriculture	OCT	1	EF	1	39	self
146.	Practical- Preparation of Vermicompost.	Production of Inputs at site	OCT	1	EF	1	38	self
147.	Safe and judicious use of Glyphosate.	Other	OCT	1	EF	1	23	self
148.	Conservation Agriculture.	Other	OCT	1	EF	1	23	self
149.	Safe and judicious use of Glyphosate.	Other	OCT	1	EF	1	34	self
150.	Conservation Agriculture.	Other	OCT	1	EF	1	36	self
151.	Exposure Visit to School of Agriculture, Seacom Skills University, Birbhum.	Other	OCT	1	EF	1	36	self
152.	Exposure Visit to School of Agriculture, Seacom Skills University, Birbhum.	Other	OCT	1	EF	1	38	self
153.	IPM of rapeseed and mustard.	IPM	OCT	1	EF	1	35	self
154.	IPM of rapeseed and mustard.	IPM	OCT	1	EF	1	40	self
155.	Cultivation practices of Potato.	Commercial production of crops	NOV	1	EF	1	33	self
156.	Integrated Pest Management of Potato.	IPM	NOV	1	EF	1	33	self
157.	Cultivation practices of Potato.	Commercial production of crops	NOV	1	EF	1	38	self
158.	Integrated Pest Management of Potato.	IPM	NOV	1	EF	1	37	self
159.	Production technology of rabi vegetables.	Commercial production of vegetable crops	NOV	1	EF	1	39	self
160.	Integrated Pest Management of rabi vegetables.	IPM	NOV	1	EF	1	38	self
161.	Demonstration of spotting of different items.	Other	NOV	1	EF	1	39	self
162.	Production technology of rabi vegetables.	Commercial production of vegetable crops	NOV	1	EF	1	39	self
163.	Exposure Visit to Regional Research Station, Bidhan Chandra Krishi	Other	NOV	1	EF	1	37	self

	Vishwavidyalaya, Sekhampur, Birbhum.							
164.	Exposure Visit to Regional Research Station, Bidhan Chandra Krishi Vishwavidyalaya, Sekhampur, Birbhum.	Other	NOV	1	EF	1	40	self
165.	Exposure Visit to District Seed Farm, Kanksa, Paschim Bardhaman.	Seed production technology	NOV	1	EF	1	39	self
166.	Exposure Visit to District Seed Farm, Kanksa, Paschim Bardhaman.	Seed production technology	NOV	1	EF	1	40	self
167.	Production technology of Banana and Citrus.	Commercial production of fruit crops	NOV	1	EF	1	39	self
168.	Production technology of Banana and Citrus.	Commercial production of fruit crops	NOV	1	EF	1	36	self
169.	Revision and recapitulation of syllabus.	Other	DEC	1	EF	1	39	self
170.	Suggestions for final exam and records submission.	Other	DEC	1	EF	1	39	self
171.	Revision and recapitulation of syllabus.	Other	DEC	1	EF	1	37	self
172.	Suggestions for final exam and records submission.	Other	DEC	1	EF	1	37	self
173.	Orientation and introductory session.	Other	DEC	1	EF	1	38	self
174.	Discussion of course module and different records to be maintained.	Other	DEC	1	EF	1	38	self
175.	Orientation and introductory session.	Other	DEC	1	EF	1	38	self
176.	Discussion of course module and different records to be maintained.	Other	DEC	1	EF	1	38	self

b) Details of participation

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Crop production and management													
Increasing production and productivity of crops	10	333	10	343	22	0	22	0	0	0	355	10	365
Commercial production of crops	22	741	22	763	55	0	55	0	0	0	796	22	818
Value addition	2	68	2	70	5	0	5	0	0	0	73	2	75
Water Management	8	273	9	282	23	0	23	0	0	0	296	09	305
Ornamental plants	6	205	6	211	16	0	16	0	0	0	221	6	227
Soil health and fertility management	12	406	11	417	30	0	30	0	0	0	436	11	447
Production of Inputs at site	8	253	16	269	35	0	35	0	0	0	288	16	304
Weed Management	10	334	10	344	25	0	25	0	0	0	359	10	369
Seed Production	4	143	4	147	9	0	9	0	0	0	152	4	156
Nutrient Management	4	132	4	136	9	0	9	0	0	0	141	4	145
Horticulture	2	71	2	73	5	0	5	0	0	0	76	2	78
Modern Techniques	8	276	10	286	18	0	18	0	0	0	294	10	304
Nursery management	2	71	2	73	5	0	5	0	0	0	76	2	78
Other	32	1042	36	1078	62	0	62	2	0	2	1106	36	1142
Total	**130**	**4348**	**144**	**4492**	**319**	**0**	**319**	**2**	**0**	**2**	**4669**	**144**	**4813**
Plant Protection	36	1176	43	1219	92	0	92	0	0	0	1268	43	1311
Processing and value addition													
Other													
Total	**36**	**1176**	**43**	**1219**	**92**	**0**	**92**	**0**	**0**	**0**	**1268**	**43**	**1311**
Farm machinery													
Farm machinery, tools and implements	2	68	2	70	5	0	5	0	0	0	73	2	75
Other													
Total	**2**	**68**	**2**	**70**	**5**	**0**	**5**	**0**	**0**	**0**	**73**	**2**	**75**
Livestock and fisheries													
Livestock production and management													

Animal Nutrition Management													
Animal Disease Management													
Fisheries Nutrition													
Fisheries Management													
Other													
Total													
Home Science													
Household nutritional security													
Economic empowerment of women													
Drudgery reduction of women													
Other													
Total													
Agricultural Extension													
Capacity Building & Group Dynamics													
Other	8	262	9	271	22	0	22	0	0	0	293	9	302
Total	**8**	**262**	**9**	**271**	**22**	**0**	**22**	**0**	**0**	**0**	**293**	**9**	**302**
Grant Total	**176**	**5846**	**202**	**6048**	**442**	**0**	**442**	**2**	**0**	**2**	**6299**	**202**	**6501**

3.4. A. Extension Activities (including activities of FLD programmes)

Nature of Extension Activity	No. of activities	Farmers				Extension Officials			Total		
		M	F	T	SC / ST (% of total)	M	F	T	M	F	T
Field Day	16	145	62	207	46	17	01	18	162	63	225
Kisan Mela	03	1006	612	1618	48	30	03	33	1036	615	1651
Kisan Ghosthi											
Exhibition											
Film Show											
Method Demonstrations											
Farmers Seminar	03	214	133	347	49	10	01	11	224	134	358
Workshop											
Group meetings											
Lectures delivered as resource persons											
Advisory Services											
Scientific visit to farmers field	12	45	10	55	75	17	10	27	62	20	82
Farmers visit to KVK	139	258	68	326	60	112	50	162	370	118	488
Diagnostic visits											
Exposure visits											
Ex-trainees Sammelan											
Soil health Camp											
Animal Health Camp											
Agri mobile clinic											
Soil test campaigns											
Farm Science Club Conveners meet											
Self Help Group Conveners meetings											
Mahila Mandals Conveners meetings											
Celebration of one day special programmes	**10**	**1635**	**755**	**2390**	**678**	**40**	**10**	**50**	**1675**	**765**	**2440**
Any Other (Specify)											
Total	**183**	**3303**	**1640**	**4943**	**956**	**226**	**75**	**301**	**3529**	**1715**	**5244**

B. Other Extension activities

Nature of Extension Activities	No. of Activities
Radio Talks	**10**
TV Talks	**-**
Extension Literature	**08**
Others, if any (Animal Health Camps)	**07**

3.5 a. Production and supply of Technological products

Village seed

Crop	Variety	Qty of Seeds (q)	Value (Rs.)	No. of farmers involved in village seed production	No. of farmers to whom seed provided							
					SC		ST		Others		Total	
					M	F	M	F	M	F	M	F

Paddy	CR Dhan-800, Ranidhan, MTU-1153, Dhiren	460	1840000	331	206	73	80	115	427	333	713	521
Black Gram	PU-31, Indira Urd	450	4725000	392	195	43	35	23	390	165	620	231
Sesame	Suprava	360	3780000	135	83	30	19	20	153	150	255	200
Lentil	L-4717, IPL-315	350	3675000	67	59	53	23	56	155	123	237	232
Mustard	PM-30, YSH-401	130	1365000	182	130	86	25	16	150	75	305	177
Chickpea	Purva	300	3150000	60	85	25	20	15	155	101	260	141
Total		**2050**	**18535000**	**1167**	**758**	**310**	**202**	**245**	**1430**	**947**	**2390**	**1502**

KVK farm

Crop	Variety	Qty of Seeds (q)	Value (Rs.)	No. of farmers to whom seed provided							
				SC		ST		Others		Total	
				M	F	M	F	M	F	M	F
Elephant foot yam	Bidhan Kusum	2.0	12000	3	2	1	1	1	1	5	4
Black Gram	PU-31	1.2	12600	3	3	5	4	3	3	11	10
Black Gram	PU-1	1.0	10500	3	4	3	1	4	5	10	10
Finger millet	Indravathi	1.0	10000	25	16	20	13	30	12	75	41
Turmeric	Saguna	2.16	23760	7	2	3	2	6	3	16	7
Ekangi	K. galana	1.0	11000	8	3	4	4	5	2	17	9
Oat	R0-11-1	1.3	7800	5	3	3	4	2	5	10	12
Paddy	Rani dhan	21.6	86400	61	43	41	63	43	52	145	158
Paddy	MTU-1153	1.6	7380	7	3	6	5	8	2	21	10
Paddy	CR Dhan-800	7.5	33750	26	11	13	15	25	23	64	49
Lentil	IPL-316	1.6	16800	15	6	10	3	4	9	29	18
Lentil	WBL-77	1.5	15750	8	3	14	4	8	2	30	9
Lentil	L-4717	2.0	21000	18	2	3	5	15	14	36	21
Chickpea	Purva	1.0	11000	2	3	1	2	2	2	5	7
Ricebean	Bidhan-1	0.5	4000	0	3	0	3	0	4	0	10
Mustard	YSH-401	0.5	5250	3	1	2	3	0	2	5	6
Total		**47.46**	**288990**	**194**	**108**	**129**	**132**	**156**	**141**	**479**	**381**

Production of planting materials by the KVKs

Crop	Variety	No. of planting materials	Value (Rs)	No. of farmers to whom planting materials provided							
				SC		ST		Others		Total	
				M	F	M	F	M	F	M	F
Vegetable seedlings											
Cauliflower	Pusa Snowball, CFL-122	5000	20000	20	25	11	21	6	11	37	57
Cabbage	Green Master, Blue Jans	5000	20000	25	25	8	16	11	12	34	53
Brocoli	Green Magic	7000	28000	16	22	10	13	15	2	41	37
Tomato	Saksham, Abhilas	11000	44000	31	27	13	30	13	11	57	68
Brinjal	VNR-212, Mukto keshi, VNR-85	5000	20000	28	28	15	13	24	16	67	57
Chilli	Siam Hot, Suryamukhi, Bullet	6000	24000	20	30	16	12	10	4	46	46
Capsicum	Asha, Jaya, Delisha	4000	16000	15	17	8	7	11	6	34	30
Yellow cauliflower	Carotena	3500	14000	10	15	15	10	10	12	35	37
Pink Cauliflower	Valentena	2600	104000	16	05	13	14	13	5	42	24
Drumstick	PKM-1	7000	140000	46	35	30	40	4	3	80	78
Others											
Fruits											
Mango											
Guava											
Lime											
Papaya											
Banana											
Dragon fruit	Delight	180	3600	9	16	7	11	7	8	23	35
Others											
Ornamental plants											
Medicinal and Aromatic											
Plantation											
Spices											
Turmeric											
Tuber											
Elephant yams											
Fodder crop saplings											
Forest Species											

Others, pl. specify											
Total		**56280**	**433600**	**236**	**245**	**146**	**187**	**124**	**90**	**496**	**522**

Production of Bio-Products

Name of the Product	Quantity (Kg)	Value (Rs.)	No. of farmers benefitted							
			SC		ST		Others		Total	
			M	F	M	F	M	F	M	F
Bio-fertilizer										
(i)Azolla	4500	270000	130	60	30	20	40	25	200	105
(ii)Vermicompost	10000	150000	150	153	50	31	25	47	225	231
Bio-pesticide										
Bio-Fungicide										
Bio-agents (Earth Worm)	150000	75000	75	63	37	26	47	25	159	114
Total	**164500**	**495000**	**355**	**276**	**117**	**77**	**112**	**97**	**584**	**450**

Production of livestock materials

Particulars of Livestock	Name of the breed	Number	Value (Rs.)	No. of Farmers benefitted							
				SC		ST		Other		Total	
				M	F	M	F	M	F	M	F
Dairy animals											
Cows											
Buffaloes											
Calves											
Others (Pl. specify)											
Small ruminants											
Sheep											
Goat											
Other, please specify											
Poultry											
Broilers (Coloured Broiler)	Coloured Broiler (Advanced Grower)	88	6189	3	0	0	0	5	0	8	0
Broilers (Coloured Broiler)	Cock	5	3750	0	0	1	0	4	0	5	0
Layers	Kadaknath Chicks	346	28100	2	0	0	0	9	0	11	0
	Kadaknath Advanced Grower	35	6230	3	0	0	0	3	1	6	1
	Aseel	3	1920	1	0	0	0	2	0	3	0
	Kaveri	19	1554	4	0	0	0	4	0	8	0
Turkey	Broad breasted White	1	330	1	0	0	0	0	0	1	0
Others (Pl. specify) (G Fowl)	G Fowl	32	5090	1	0	0	1	1	0	2	1
Fisheries											
Indian Carp	Rohu, Katla	650	7000	31	0	2	0	35	0	68	0
Exotic carp											
Mixed carp											
Fish fingerlings											
Spawn											
Others (pl. specify)	Singi	50	14000	25	0	10	13	25	0	60	13
Grand Total		**1229**	**74163**	**71**	**0**	**13**	**14**	**88**	**1**	**172**	**15**

3.5. b. Seed Hub Programme - *"Creation of Seed Hubs for Increasing Indigenous Production of Pulses in India"*

i) Name of Seed Hub Centre:

Name of Nodal Officer:	
Address:	
e-mail:	
Phone No.: Mobile:	

ii) Quality Seed Production Reports

Season	Crop	Variety	Production (q)			
			Target	Area sown (ha)	Production	Category of Seed (F/S, C/S)
Kharif 2023						
Rabi 2021-22						
Summer/Spring 2023						

Kharif 2023						
Rabi 2022-2023						

iii) Financial Progress

Fund received. (2019-20, 2020-21, 2021-22 and 2022-23)	Expenditure (Rs. in lakhs)		Unspent balance (Rs. in lakhs)	Remarks
	Infrastructure	Revolving fund		
2019-20				
2020-21				
2021-22				
2022-23				

iv) Infrastructure Development

Item	Progress
Seed processing unit	
Seed storage structure	

3.6. (A) Literature Developed/ Published (with full title, author & reference)

Item	Title	Author's name	Number	Circulation
Research paper	1. Agriculture Based Integrated Farming for Improving Income and Nutrition in Upland Farming Situation of Birbhum District – Submitted to NABARD funded IFS Project (Formulation of Area Development Schemes and Development of Area Specific Software Template for Model Integrated Farming across Six Agroclimatic Regions of West Bengal)	**Madhuchhanda Khan,** Krishna Mitra and Subrata Mandal	04	Not Assessed
	2. "Enhancing livelihoods in farming communities through super – resolution agromet advisories using advanced digital agriculture technologies", Journal of Agrometeorology [ISSN No: 0972 – 1665 (Print), ISSN No.: 2583 – 2980 (Online)], Vol. No.: 25 (1) pp. 68 – 78, March, 2023	**Narayan Chandra Sarkar, Koushik Mondal, Ayan Das, Asis Mukherjee, Subrata Mandal, Souvik Ghosh, Bimal Bhattacharya, Roger Lawes and Samsul Huda**		
	3. Agriculture Based Integrated Farming System for Sustainable Livelihood Security – A Case Study, Submitted to NABARD funded IFS Project (Formulation of Area Development Schemes and Development of Area Specific Software Template for Model Integrated Farming across Six Agroclimatic Regions of West Bengal)	**Madhuchhanda Khan,** Krishna Mitra and Subrata Mandal		
	4. Identifying Driving factors for developing Integrated Farming in West Bengal, India	Avijit Halder, Sanjit Maiti, Rupak Goswami**, Madhuchhanda Khan,** Pradip Dey		Accepted by Indian Journal of Agri. Sciences
Seminar/conference/ symposia papers				
Books				
Bulletins	1. Agromet Weather Bulletin	**Sri Sayak Mahato**	93	
Newsletter				
Popular Articles	1. Barshakalin Gobadipashur Rog O Tar Pratikar [Bardhaman Jyoti, 24/07/2023, pp. 4]	**Dr. Madhuchhanda Khan**	14	Not Assessed
	2. Turkey Palan [Bardhaman Jyoti, 02/10/2022, 54(4), pp. 6]	**Dr. Madhuchhanda Khan**		
	3. Aseel Murgi Palan [Bardhaman Jyoti, 13/02/2023, pp. 4]	**Dr. Madhuchhanda Khan**		
	4. '' Narkel Gachher Opor Proshikhon Shibir'' – 09.01.2023 [Bardhaman Jyoti Potrika] (Report)	**Dr. Subrata Mandal and Dr. Goutam Mandal**		
	5. '' Nimnomukhi Parad: Krishi O Machh rokhay poramorsho'' - 10.01.2023 [Kolom Potrika]	**Sri Sayak Mahato**		
	6.'' Bebi Corn Chaser Porikolpana'' – 13.03.2023 [Bardhaman Jyoti Potrika]	**Dr. Subrata Mandal,**		
	7. '' Millet ebong Barir Bagane Chase Jor'' – 25.03.2023 [Ananda Bazar Patrika]	**Dr. Subrata Mandal, Sri Palash Ankure and Sri. Swapan Bauri**		
	8. ''Shitkalin chas droto shuru korar Poramorsho'' - 26.03.2023 [Kolom Potrika]	**Sri Sayak Mahato**		
	9. '' Bristi Sohay Amer Pholon'' - 26.04.2023 [Ananda Bazar Patrika]	**Dr. Subrata Mandal**		
	10. '' Rogin Machh Chaser utsaho dite proshikhpn shibir'' – 26.04.2023 [Ananda Bazar Patrika]	**Dr. Subrata Mandal and Dr. Arun Kumar Barik**		
	11. '' Kom Bristiteo Chas kon Pothe'' - 20.07.2023 [Ananda Bazar Patrika] (Report)	**Dr. Prabuddha Ray ad Dr. Subrata Madal**		
	12. '' Kharif Til O Kolai Chaser Proshikhan'' – 25.07.2023 [Bardhaman Jyoti Potrika]	**Dr. Subrata Mandal**		
	13. '' Food and Nutrition for Farmers'' Somporkito proshikhon shibir – 30.08.2023 [Bardhaman Jyoti Potrika] (Report)	**Dr. Subrata Mandal, Sri Sourav Mondal and Sri Palash Ankure**		
	14. '' Anukhadyer Byabohar'' – 29.11.2023 [Ananda Bazar Patrika]	**Dr. Subrata Mandal**		

Book Chapter	1. Sorghum (Sorghum bicolour (L.) Moench) as Millet: A Boon to Agriculture in Changing Climatic Situation in Lateritic Belt of West Bengal [Published in: Recent Advancement in Geographical Studies: A Multidimensional Outlook Published By: Rajesh Publication, ISBN: 978-93-91139-60-5] (pp. 283 - 292)	**Subrata Mandal** and Sudipa Nag	02	Not Assessed
	2. Potentiality of Chandrasoor *(Lepidium Sativam L.)* Seeds as Functional Food and Herbal Medicine: A Review [Published in: Recent Advancement in Geographical Studies: A Multidimensional Outlook Published By: Rajesh Publication, ISBN: 978-93-91139-60-5] (pp. 267 - 282)	Subarna Mandal, Kalyan Nandi and **Subrata Mandal**		
Extension Pamphlets/ literature	1. "Krishi Khetrer Unnonayan OO Adhuunikikaraner jono (Mooldhan Prawaho samparke) Bharat Sarkarer Krishi OO Krishak Kalyan Mantralya Sampraotik Uddog" [Recent Initiatives (regarding Capital flow) of Ministry of Agriculture and Farmers Welfare, Govt. of India for Development and Modernization of Agricultural Sector]	**Dr. Prabuddha Ray**	08	4000
	2. "Prashikhan Karmosuchi Mulyan – Abhimat Suchak Firti Tathya Ghapok Prashnottar Kathamo" (Question – Answer Schedule – Perception based Feedback Form for Evaluation of Training Programmes)	**Dr. Prabuddha Ray**		
	3. Unnoto Prathay Ragi Chash (Improved Cultivation Practices of Finger Millet)	**Dr. Subrata Mandal**		
	4. Unnoto Prathay Bajra Chash (Improved Cultivation Practices of Pearl Millet)	**Dr. Subrata Mandal**		
	5. Prakitik Chaser Bivinno Upadan (Different inputs of Natural Farming)	**Dr. Subrata Mandal**		
	6. Banglar Kalo Chhagal Palon (Rearing of Black Bengal Goat)	**Dr. Madhuchhanda Khan**		
	7. Abhaoa Anukul Susthayi Krishi (Climate Resilient Agriculture)	**Sri Sayak Mahato**		
	8. Sree Anna- Millet utpadone Kendriyo sarkarer utsaho dan (Encouragement of central government in Millet Cultivation)	**Dr. Prabuddha Ray**		
Technical reports	01. Annual Report	**Dr. Subrata Mandal, Sri. Sourav Mondal, Dr. Prabuddha Ray, Dr. Madhuchhanda Khan, Sri. Sayak Mahato, Sri. Suraj Kumar Bhakta and Sri. Palash Ankure**	26	Not Assessed
	02. Annual Action Plan			
	03. SAC Report			
	04. Rathindra KVK, Birbhum, Report on Celebration of Kisan Samman Diwas - 23.12.2023			
	05. Rathindra KVK, Birbhum, Report on World Soil Day - 05.12.2023			
	06. Rathindra KVK, Birbhum, Report on Capacity Building Programme on ICAR-IIHR Technologies - 23.11.2023			
	07. Rathindra KVK, Birbhum, Report on Webcasting of Release of 15th Instalment of PM KISAN - 15.11.2023			
	08. Rathindra KVK, Birbhum, Report on Vigilance Awareness Week from 30.10.2023 to 05.11.2023			
	09. Rathindra KVK, Birbhum Report on Swachhata Hi Sewa (SHS) from 15.09.2023 to 02.10.2023			
	10. Rathindra KVK, Birbhum, Report on Seed Distribution under CFLD by Director ATARI-Kolkata - 02.09.2023			
	11. Rathindra KVK, Birbhum, Report on Celebration of National Nutrition Week – 2023 from 01.09.2023 to 07.09.2023			
	12. Rathindra KVK, Birbhum, Report on Visit of Founder Director and Vice Chancellor, ICAR-National Institute of Biotic Stress Management and Director, ICAR-ATARI, Kolkata - 01.09.2023			
	13. Rathindra KVK, Birbhum, Report on Training Programme on Seed Production of Different Crops including Millets Sponsored by National Seeds Corporation Limited - 23.08.2023			
	14. Rathindra KVK, Birbhum, Report on In-Service Training Programme on Improved Cultivation Practices of Different Millets on 11.08.2023			
	15. Rathindra KVK, Birbhum, Report on Organization of Tree Plantation Programme - 09.08.2023			
	16. Rathindra KVK, Birbhum, Report on Halakarṣaṇa Utsav - 09.08.2023			
	17. Rathindra KVK, Birbhum, Report on Webcasting of Release of 14th Instalment of PM KISAN - 27.07.2023			
	18. Rathindra KVK, Birbhum, Report on Celebration of 95th ICAR Foundation Day from 16.07.203 to 18.07.2023			
	19. Rathindra KVK, Birbhum, Report on Training Programme & Farmers - Scientists Meet - 05.07.2023			

	20. Rathindra KVK, Birbhum, Report on Training Programme on Ornamental Fish Rearing - 04.07.2023			
	21. Rathindra KVK, Birbhum, Report on World Environment Day - 05.06.2023			
	22. Rathindra KVK, Birbhum, Report on World Milk Day - 01.06.2023			
	23. Rathindra KVK, Birbhum, Report on International Conference on Millet - 18.03.2023			
	24. Rathindra KVK, Birbhum, Report on Organization of Awareness Camp and PM Kisan Samman Nidhi - 27.02.2023			
	25. Rathindra KVK, Birbhum, Report on FoCT Training on Coconut Tree – 2023 from 02.01.2023 to 07.01.2023			
	26. Rathindra KVK, Birbhum, Report on Farmers - Scientists Meet on 04.01.2023			
Electronic Publication (CD/DVD etc)	1. RATHINDRA KVK_BIRBHUM_COLOURED BROILER.mp4 2. RATHINDRA KVK_BIRBHUM_EKANGI.mp4 3. RATHINDRA KVK_BIRBHUM_MUSHROOM.mp4	**Dr. Prabuddha Ray**	03	3000
You Tube video published			21	33056
	1. Azolla Farming (Manita Krishi Katha, 3.10.2023)	**Dr. Subrata Mandal**		658
	2. Paddy Cultivation and common Insect attack (Manita Krishi Katha, 6.10.2023)	**Sri Sourav Mondal**		1236
	3. Application of Drone in Agriculture (Manita Krishi Katha, 9.10.2023)	**Sri Sourav Mondal**		1697
	4. Pest and Diseases of Rice in farmers' fields (Manita Krishi Katha, 17.10.2023)	**Sri Sourav Mondal**		890
	5. Pest and diseases in Broad Bean (Manita Krishi Katha, 19.10.2023)	**Sri Sourav Mondal**		400
	6. Millet Cultivation (Manita Krishi Katha, 22.10.2023)	**Dr. Subrata Mandal**		1184
	7. Yam Bean pest and diseases (Manita Krishi Katha, 27.10.2023)	**Sri Sourav Mondal**		669
	8. Honeybee Farming (Manita Krishi Katha, 29.10.2023)	**Sri Sourav Mondal and Madhab Tudu**		1583
	9. Black Gram Cultivation (Manita Krishi Katha, 1.11.2023)	**Dr. Subrata Mandal**		266
	10. Making of Vermicompost (Manita Krishi Katha, 3.11.2023)	**Sri Palash Ankure**		4554
	11. Symptoms and solutions of long bean diseases (Manita Krishi Katha, 7.11.2023)	**Sri Sourav Mondal**		353
	12. Common insect attack in different farming (Manita Krishi Katha, 12.11.2023)	**Sri Sourav Mondal**		207
	13. Cultivation of Turmeric in Mango orchard for better income (Manita Krishi Katha, 23.11.2023)	**Dr. Subrata Mandal**		439
	14. Pest and disease management of ridge gourd (Manita Krishi Katha, 20.11.2023)	**Sri Sourav Mondal**		549
	15. Effect of climate change in Agriculture (Manita Krishi Katha, 23.11.2023)	**Sri Sayak Mahato**		606
	16. Effects of different agro chemicals (Manita Krishi Katha, 28.11.2023)	**Sri Sourav Mondal**		1808
	17. Market of Azolla (Manita Krishi Katha, 4.12.2023)	**Dr. Subrata Mandal**		4939
	18. Management of crops from unexpected rainfall (Manita Krishi Katha, 7.12.2023)	**Dr. Subrata Mandal**		234
	19. Different types of wilt management of brinjal (Manita Krishi Katha, 11.12.2023)	**Sri Subrata Mandal**		8569
	20. How to grow mushroom (Manita Krishi Katha, 18.12.2023)	**Sri Sourav Mondal and Madhab Tudu**		1518
	21. Annato Plant and its uses (Manita Krishi Katha, 24.12.2023)	**Dr. Subrata Mandal**		692

N.B.: Please enclose a copy of each. In case of literature prepared in local language please indicate the title in English

(B) Details of HRD programmes undergone by KVK personnel:

Sl. No.	Name of programme	Name of course	Name of KVK personnel and designation	Date and Duration	Organized by
1.	Management Development Programme	Management Development Programme for Senior Scientist & Head of KVKs at ICAR-NAARM, ICAR KVK-UJJAIN, ICAR-ATARI KOLKATA	Dr. Subrata Mandal Senior Scientist and Head, Rathindra KVK, Visva-Bharati, Sriniketan, Birbhum	31/01/2023 to 14/02/2023 (16 days) 17/02/2023 to 26.02.2023 (10 days) 01.03.2023 to 05.03.2023 (5 days)	ICAR-NAARM, Hyderabad
2.	Virtual Conference	Millet Conference	Dr. Subrata Mandal Senior Scientist and Head, Rathindra KVK, Visva-Bharati, Sriniketan, Birbhum	18/03/2023 (01 Days)	ICAR, Krishi Anusandhan Bhavana, New Delhi
3.	Workshop	Policy Workshop On implementable technologies for rainfed region of Eastern India	Dr. Subrata Mandal Senior Scientist and Head, Rathindra KVK, Visva-Bharati, Sriniketan, Birbhum	22/05/2023 (01 Days)	KVK Kalyan, Purulia
4.	HRD Training Programme	Sustainable Integrated Farm Practices for Entrepreneurship Development Through Animal Husbandry and Allied Practices	Dr. Madhuchhanda Khan, SMS (Animal Science), Rathindra KVK, Visva-Bharati, Sriniketan, Birbhum	06/06/2023 to 08/06/2023 (03 Days)	West Bengal University of Animal and Fishery Sciences, Kolkata in Collaboration with MANAGE, Hyderabad
5.	Zonal Workshop	Annual zonal workshop of KVKs 2023	Dr. Subrata Mandal Senior Scientist and Head, Rathindra KVK, Visva-Bharati, Sriniketan, Birbhum	07/06/2023 to 09/06/2023	UBKV & ICAR-ATARI, Kolkata
6.	WORKSHOP ON CONVERGENCE PLATFORM OF CSISA	"Convergence Platform Working" facilitated by Cereal Systems Initiative for South Asia (CSISA)	Dr. Prabuddha Ray, SMS (Agricultural Extension), Rathindra KVK, Visva-Bharati, Sriniketan, Birbhum	16/06/2023 (01 Day)	(ICAR-ATARI, Kolkata and Directorate of Extension Education, Odisha University of Agriculture & Technology (DEE-OUAT), Bhubaneswar in Collaboration with CSISA-CIMMYT, India
7.	Online Discussion	Online Discussion For production of certified seeds under NLM	Dr. Subrata Mandal Senior Scientist and Head, Rathindra KVK, Visva-Bharati, Sriniketan, Birbhum	18/07/2023 (01 Day)	Director of Animal Husbandry and Veterinary Services, West Bengal
8.	National Workshop	National Workshop on Role of Skill Development in Tapping Business Potential of Agriculture	Shri Sourav Mondal, SMS (Plant Protection), Rathindra KVK, Visva-Bharati, Sriniketan, Birbhum	01/08/2023 to 02/08/2023 (02 Days)	MANAGE, Hyderabad
9.	Training	Training for UAT of Krishi Mapper mobile app for monitoring CFLD programme	Shri Palash Ankure Farm Manager, Rathindra KVK, Visva-Bharati, Sriniketan, Birbhum	01/09/2023 (01 Day)	Joint Secretary Krishi Bhawan, New Delhi
10.	Virtual Discussion	Virtual discussion about the guidelines of social media management.	Dr. Subrata Mandal Senior Scientist and Head, Rathindra KVK, Visva-Bharati, Sriniketan, Birbhum	04/09/2023 (01 Day)	ICAR-ATARI, Kolkata
11.	Review Meeting cum workshop	Online Review Meeting on CFLD (Pulses & Oilseeds) during kharif, 2023	Dr. Subrata Mandal Senior Scientist and Head, Rathindra KVK, Visva-Bharati, Sriniketan, Birbhum	08/09/2023 (01 Day)	ICAR-ATARI. Kolkata
12.	Online Seminar	Online seminar of ongoing catalyzing transformation seminar series on paradigm shifts in Extension to appropriately support sustainable agricultural development. Delivered by Dr P. DAS	Dr. Subrata Mandal Senior Scientist and Head, Rathindra KVK, Visva-Bharati, Sriniketan, Birbhum	29/09/2023 (01 Day)	ICAR-ATARI. Kolkata

13.	Consultation Meeting	Online Consultation meeting on scope of demonstration of rural technologies	Dr. Subrata Mandal Senior Scientist and Head, Rathindra KVK, Visva-Bharati, Sriniketan, Birbhum	10/10/2023 (01 Days)	DST, West Bengal
14.	Online Training Programme	Skill on Video-based Training Material	Sri. Suraj Kumar Bhakta, Programme Assistant (Computer Programmer), Rathindra KVK, Visva-Bharati, Sriniketan, Birbhum	10/10/2023 to 12/10/2023 (03 Days)	State Agricultural Management & Extension Training Institute (SAMETI) –West Bengal Ramakrishna Mission Ashrama, Narendrapur, Kol-700 103
15.	Online Training Programme	Training of Master Trainer for Safe and Judicious use of Glyphosate by PCOs.	Shri Sourav Mondal, SMS (Plant Protection), Rathindra KVK, Visva-Bharati, Sriniketan, Birbhum	11/10/2023 (01 Day)	MANAGE, Hyderabad
16.	Meeting & Discussion	Online meeting and discussion on Tweeting materials on Swachhata Special campaign 3	Dr. Subrata Mandal Senior Scientist and Head, Rathindra KVK, Visva-Bharati, Sriniketan, Birbhum	16/10/2023 (01 Days)	ICAR-ATARI. Kolkata
17.	Online Workshop	Online Workshop on preventive vigilance, cyber security and prevention of banking frauds.	Dr. Subrata Mandal Senior Scientist and Head, Rathindra KVK, Visva-Bharati, Sriniketan, Birbhum	03/11/2023 (01 Days)	ICAR-ATARI. Kolkata
18.	Online Training Programme	Data Management for Agricultural Record and Documentation	Sri. Suraj Kumar Bhakta, Programme Assistant (Computer Programmer), Rathindra KVK, Visva-Bharati, Sriniketan, Birbhum	07/11/2023 To 09/11/2023 (03 Days)	State Agricultural Management & Extension Training Institute (SAMETI) –West Bengal Ramakrishna Mission Ashrama, Narendrapur, Kol-700 103 and MANAGE, Hyderabad
19.	Online Training cum Workshop	Kisan Sarathi	Sri. Suraj Kumar Bhakta, Programme Assistant (Computer Programmer), Rathindra KVK, Visva-Bharati, Sriniketan, Birbhum	13.01.2023, 28.02.2023, 27.01.2023, 10.02.2023, 24.02.2023, 10.03.2023, 24.03.2023, 12.05.2023, 26.05.2023, 23.06.2023, 14.07.2023, 28.07.2023, 11.08.2023, 25.08.2023, 22.09.2023, 13.10.2023, 10.11.2023 (17 Days)	IASRI, New Delhi
20.	Review Meeting	Interaction of Hon'ble DG, ICAR with KVKs, DEEs & Heads	Dr. Subrata Mandal Senior Scientist and Head, Rathindra KVK, Visva-Bharati, Sriniketan, Birbhum	09/11/2023 (01 Days)	Division of Agril. Extension, ICAR
21.	HRD Programme	Contemporary Issues and Recommendation from Network Research in Food Crops for Facilitating OFT Proposal	Shri Sourav Mondal, SMS (Plant Protection), Rathindra KVK, Visva-Bharati, Sriniketan, Birbhum	12/19/2022 to 12/20/2023 (02 Days)	BCKV, Kalyani, Nadia, W. B.
22.	Review Meeting	Virtual review meeting regarding interaction of Hon'ble PM	Dr. Subrata Mandal Senior Scientist and Head, Rathindra KVK, Visva-Bharati, Sriniketan, Birbhum	08/12/2023 (01 Days)	DDG, ICAR, New Delhi
23.	HRD Training Programme	HRD Training Programme on contemporary issues and recommendations from network research in food crops for facilitating OFT proposals	Shri Palash Ankure Farm Manager, Rathindra KVK, Visva-Bharati, Sriniketan, Birbhum	12/19/2022 to 12/20/2023 (02 Days)	DEE, BCKV

3.7. Success stories/Case studies, if any (two- or three-pages write-up on 1-2 best case(s) with suitable action photographs)

#A. Success Story on Oilseed:

Name of KVK: Rathindra Krishi Vigyan Kendra, PSB, Visva-Bharati, Sriniketan, Birbhum
Name of the Crop& Variety: Sesame, Var- Suprava (Season: - Kharif and Year: - 2023-24)
Farmer's Name: - Smt. Lipika Mandal
Husband's Name: - Brinda ban Mandal
Address: - Village: –Jhapartala, P.O: –Metela, Police Station: - Dubrajpur, Block: - Dubrajpur, Pin: - 731123, Dist.: - Birbhum, State: - West Bengal
Phone Number: - 9593561253
Aadhar Number: - 859682990968

Background information about farmer's field:

i) How and why he/ she brought under CFLD?
Smt. Lipika Mandal and several other practicing farmers & farm women of the locality of the village Jhapartala, P.O–Metela, C.D. Block-Dubrajpur, District- Birbhum have undergone various skill development training programmes on the Topic of "Crop Diversification through introduction of improved Oilseed in Kharif seasons", organized by the Rathindra KVK, Palli Siksha Bhavana, Visva-Bharati, Sriniketan, Birbhum. In this context, this farmer along with several other farmers of her locality has shown keen interest on growing Kharif oilseed cultivation especially of Sesame instead of Kharif Paddy in rainfed upland condition. Among this group of farmers & farm women Smt. Lipika Mandal maintained a high level of interest and lead the other fellow farmers to become the partner Farmers in the Cluster Front Line Demonstration Programmes on Kharif Oilseed viz. Sesame cultivation in kharif season: 2023-24 in above mentioned area.

ii) Existing practices before adopting CFLD recommendation:
Farmers generally use Sesame varieties like B- 67 (Tilottama) and they do not use any micronutrients and herbicides. They only use chemical fertilizers @ 80- 00 – 00 or 80 – 20 – 00 (N-P-K Respectively Kg. /ha).

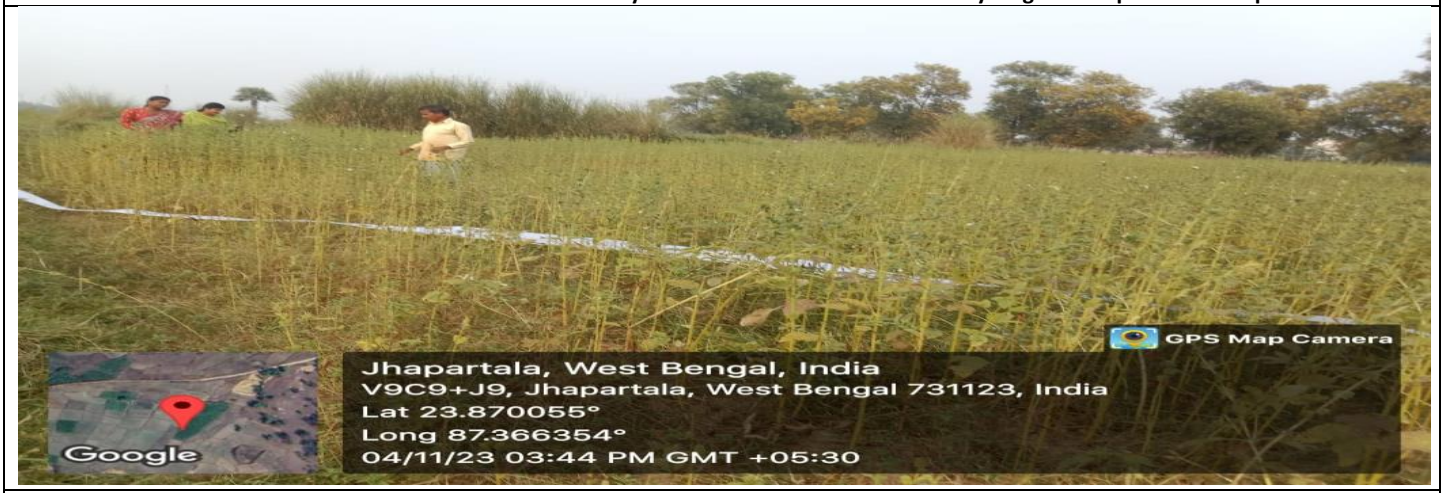
Institutional Involvement:
i) Details of inputs and Technology provided:
(A) Seeds of Improved Variety Suprava (CUMS-17)
(B) Herbicides: - Pendimethalin as per-emergence
(C) Foliar spray of Micro- Nutrients (Zinc).
(D) Need based plant protection chemicals

ii) Details of application of technology with photograph:
(A) Seeds of Improved Variety Suprava (CUMS-17) @ 6 Kg. /Ha
(B) Method of seed sowing: - Broadcasting
(C) Application of herbicides. Pendimethalin @ 3 lit. / ha at 1- 3 DAS.
(D) Foliar Spray of Micro- Nutrients: - Zn EDTA @ 1 gm. / lit. of water at 25 and 45 DAS.

Data Collection of Sesame on CFLD Kharif Oilseed -2023 by the Rathindra KVK at the Vegetative stage of the plot of Smt. Lipika Mandal

Data Collection of Sesame on CFLD Kharif Oilseed -2023 by the Rathindra KVK at the Flowering stage of the plot of Smt. Lipika Mandal

Data Collection of Sesame on CFLD Kharif Oilseed-2023 by the Rathindra KVK at the Maturity stage of the plot of Smt. Lipika Mandal



Data collecting of Sesame under Cluster FLD Kharif Oilseed-2023 organized by the Rathindra KVK, Birbhum at the Harvesting stage of the plot of Smt. Lipika Mandal

iii) Field Days observed:

26.08.2023- Land preparation & Sowing of improved seeds.
01.09.2023- Fertilizer application
29.09.2023- Vegetative growth stage.
12.12.2023- Harvesting stage.

Success Point:

Use of new improved variety Suprava distinctly increased the yield by 67 % than the old variety, Tillotoma (B-67). Besides that, spraying of micronutrient Zn played beneficial role than local check. And ultimately the benefits of farmers increased by 61.6 %.

Farmer Feed Back:

The demonstrated variety Suprava is shorter in duration by 15 days on an average than the existing variety i.e. B- 67 (Tilottama) and the average height of the demonstrated variety is also shorter by 10-15 cms. than the Tilottama variety. The number of siliquae per plant is 47 on an average under demonstrated variety whereas in the case of the existing variety it is only 30 in numbers. It increased the farmer's income than those obtained from paddy cultivation.

Outcome Yield (q/ha):

Demonstration----------12.9 q/ha
Potential yield of variety--------15.0 q/ha
District average ----------9.33 q/ha
State Average----------9.15 q/ha

Performance of the technology vis-à-vis local check (Increase in productivity and returns)

Specific Technology	Yield (q/ ha)	Gross Cost (Rs/ha)	Gross income (Rs/ha)	Net Income (Rs/ha)	B:C Ratio
Farmer practices	7.7	16400	42350	25950	2.58
Demonstration	12.9	17000	70950	53950	4.17
% increase	67.5	3.65	67	107.8	61.6

#B. Success Story on Pulse:

Name of KVK: Rathindra Krishi Vigyan Kendra, PSB, Visva-Bharati, Sriniketan, Birbhum
Name of the Crop & Variety: Black gram, Var: - Indira Urd Pratham [Season: - Kharif and Year: - 2023-24]
Farmer's Name: -Smt. Binapani Bagdi
Husband's Name: - Hem Bagdi
Address: - Village - Haridaspur P.O- Bakeswar, Police Station: - Dubrajpur
Block- Dubrajpur, Pin- 731123, Dist- Birbhum
Phone Number: - 7063857105
Aadhar Number: - 609060344513

Background information about farmer's field:
i) How and why he/ she brought under CFLD?
Smt. Binapani Bagdi several other practicing farmers & farm women of the locality of the village Haridaspur, PO- Bakeswar C.D. Block- Dubrajpur, District- Birbhum have undergone various skill development training programmes on the Topic of "Crop Diversification through introduction of improved pulses in Kharif seasons", organized by the Rathindra KVK, Palli Siksha Bhavana, Visva-Bharati, Sriniketan, Birbhum. In this context, this farm women along with several other farmers of her locality has shown keen interest on growing Kharif pulses cultivation especially of Black gram instead of kharif Paddy in rainfed upland condition. Among this group of farmers & farm women Smt. Binapani Bagdi maintained a high level of interest and lead the other fellow farmers to become the partner Farmers in the Cluster Front Line Demonstration Programmes on Kharif Pulses viz. Black gram cultivation in kharif season: 2023-24 in above mentioned area.

ii) Existing practices before adopting CFLD recommendation:
Farmers generally use Black gram varieties like Kali-50, and they do not use any micronutrients and herbicides. They only use chemical fertilizers @ 18- 46 – 00 (N-P-K Respectively Kg. /ha).

Institutional Involvement:
i) Details of inputs and Technology provided:
(A) Seeds of Improved Variety: Indira Urd Pratham
(B) Herbicides: - Pendimethalin as per-emergence
(C) Foliar spray of Micro- Nutrients Boron-20
(D) Need based plant protection chemicals

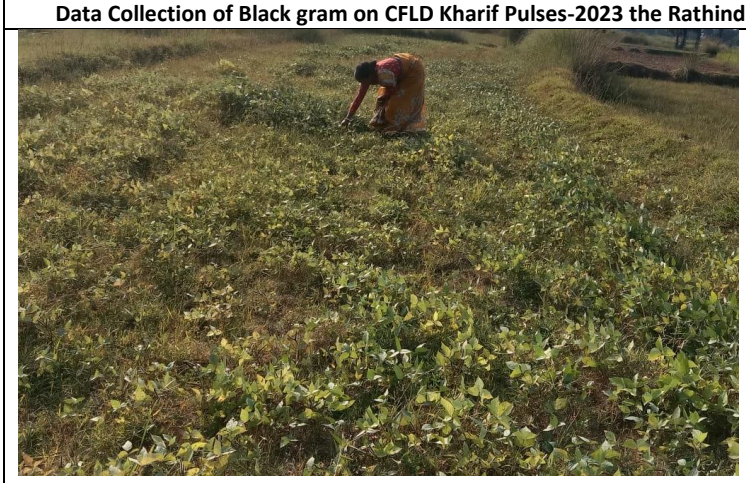
ii) Details of application of technology with photograph:
(A) Seeds of Improved Variety: Indira Urd Pratham @ 30Kg. /Ha
(B) Method of seed sowing: - Broadcasting
(C) Application of herbicides. Pendimethalin @ 3 lit. /ha at 1- 3 DAS.
(D) Foliar Spray of Micro- Nutrients: - Boron-20 @ 2 gm. / lit. of water at 25 and 45 DAS.

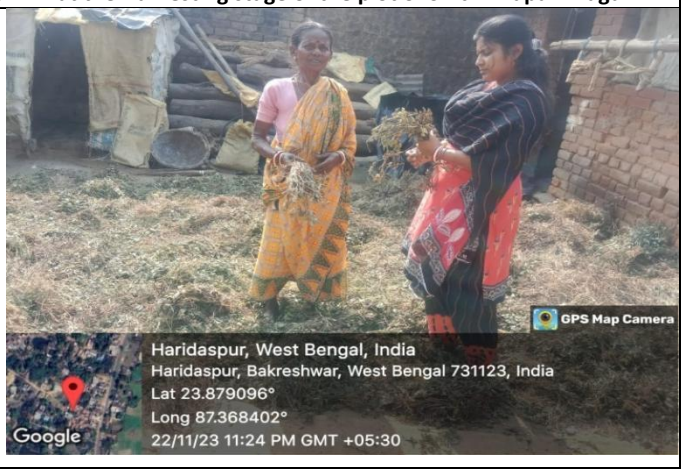
Data collection of Blackgram on CFLD Kharif Pulses-2023 by Rathindra KVK at the vegetative Growth stage of the plot of Smt. Binapani Bagdi

Data Collection of Blackgram on CFLD Kharif Pulses-2023 by the Rathindra KVK at the Flowering stage of the plot of Smt. Binapani Bagdi

Data Collection of Black gram on CFLD Kharif Pulses-2023 by the Rathindra KVK at the Maturity stage of the plot Smt. Binapani Bagdi

Data Collection of Black gram on CFLD Kharif Pulses-2023 the Rathindra KVK at the Harvesting stage of the plot of Smt. Binapani Bagdi





iii) Field Days observed:

01.09.2023- Land preparation & Sowing of improved seeds.
03.09.2023- Fertilizer application
29.09.2023- Vegetative growth stage.
23.11.2023- Harvesting stage.

Success Point:

Use of new improved variety Indira Urd Pratham distinctly increased the yield by 116 % than the old variety, Kali-50. Beside that spraying of micronutrient Boron-20 played beneficial role than local check. And ultimately the benefits of farmers increased by 103 %.

Farmer Feed Back:

The demonstrated variety Indira Urd Pratham is shorter in duration by 15 days on an average than the existing variety i.e. Kali-50 and the average height of the demonstrated variety is also shorter by 10-15 cms than the Kali-50 variety. The number of siliquae per plant is 47 on an average demonstrated variety whereas in the case of the existing variety it is only 30 in numbers on an average. It increased the farmers income than those obtained from paddy cultivation.

Outcome Yield (q/ha):

Demonstration----------13.0 q/ha
Potential yield of variety--------14.0 q/ha
District average ----------6.22 q/ha
State Average----------6.76q/ha.

Performance of the technology vis-à-vis local check (Increase in productivity and returns)

Specific Technology	Yield (q/ ha)	Gross Cost (Rs/ha)	Gross income (Rs/ha)	Net Income (Rs/ha)	B:C Ratio
Farmer practices	6.0	18050.00	36,000.00	17,950.00	1.99
Demonstration	13.0	19300.00	78,000.00	59,000.00	4.04
% increase	116	6.9	116	228	103

#C. Success Story on Livestock Rearer

Name of KVK: Rathindra Krishi Vigyan Kendra, PSB, Visva-Bharati, Sriniketan, Birbhum
Farmer's Name: - Sri Priyasis Ghosh
Address: - Vill-Digha, P.O.- Digha, C. D. Block - Sainthia, Dist.- Birbhum, Pin-731236, West Bengal
Phone Number: - 7029812721
Email – Id: rathindrakvk@gmail.com

A brief about successful venture:
Sri Priyasis Ghosh, S/O - Sri Sisir Kumar Ghosh aged about 44 years is a progressive Livestock Rearer of Birbhum district of West Bengal. He is engaged with agricultural and animal husbandry practices. He is having only 1 acre of land and used to grow paddy, mustard, potato and vegetables etc in traditional way which was not remunerative for him. He owned two deshi cows which were producing 2.5 to 3 Kg milk per day. He was then attracted and motivated by Rathindra Krishi Vigyan Kendra about improved livestock rearing for livelihood and sustenance. Slowly he developed interest and nowadays he has 3 graded up milch cattle and 5 heifers by 2023.Apart from dairy farming Sri Ghosh begins to rear cross breed goat after studying the demand at local market and nowadays 34 no. of goats are being reared by him. Besides he started rearing coloured broiler in semi-intensive system and RIR chicken in backyard. He used to keep 35 -40 chicken in backyard and in semi-intensive system.

Contribution of KVK towards the venture:

Sri Priyasis Ghosh, a dynamic Animal Rearer was selected by Rathindra Krishi Vigyan Kendra for on Farm Trial Programme on dairy farming. Sri Ghosh was also given intensive skill development training programme of Agriculture Skill Council of India organized by Rathindra Krishi Vigyan Kendra on the job role Small Poultry Farmer for the financial year 2019-20 and certified by Agriculture Skill Council of India. He procured RIR chicken for backyard poultry rearing from Rathindra Krishi Vigyan Kendra. Sri Ghosh was selected for front line Demonstration programme on quality fodder cultivation. Besides he got training on scientific goat rearing and low-cost feed formulation for poultry from Krishi Vigyan Kendra. Identifying his need he was supported by Rathindra KVK scientific livestock rearing like breed selection, deworming, vaccination, different disease treatment, fodder cultivation. low-cost feed preparation and overall management practices as and when necessary. Free of cost vaccine, low-cost feed, fodder seed, mineral supplements, RIR poultry chicks supplied by Rathindra KVK were also the part of initial inputs.

Coverage and Impact of training /hand holding on the successful venture:

Rathindra Krishi Vigyan Kendra identified his need and motivated him through intensive skill training programme to take up improved livestock rearing for additional income.
Now the total income of the farmer from livestock rearing has reached Rs.1,64,780 per annum. Besides income generation, backyard poultry and rearing of coloured broiler meets the demand of nutrition supplementation in the form of valuable animal protein through meat and eggs to this rural family.

Economics of the Enterprise

Dairy	
Feed Cost **a) Green Fodder cultivation** **b) Dry Fodder @5 Kg/day** **c) Concentrate @ 4Kg/day** **Veterinary and other exp.** **Total**	 **10000** **50000** **90720** **8000** **160720**
Sell of milk **Sell of heifer** **Total**	**202500** **50000** **252500**
Gross Income	**252500**
Net Income	**91780**
B.C ratio	**1.57**
Goatery	
Feed cost: **a) Concentrate@100 gm/day** **b) Green grass (mainly by grazing)** **c) Fodder** **d)Veterinary and other exp.** **Total**	 **18000** **2500** **2500** **23000**
Sell of buck (11 months)-Rs.6000 **Sell of Does-(11 months) –Rs.4000** **Total**	**48000** **48000** **96000**
Gross Income	**96000**
Net Income	**73000**
B/C ratio	**4.17**

Horizontal spread of the successful case: His success would be a nice motivation to the unemployed youths. In addition to this it is an eye opener for other farmers of this village and neighbouring villages to adopt mixed livestock farming for their livelihood generation and sustenance.


Variety: –
AFRICAN TALL


LINE DEMONSTRATION
ON
FODDER CULTIVATION

3.8. Give details of innovative methodology or innovative technology of Transfer of Technology developed and used during the year.

Sl. No.	Name/ Title of the Technology	Name/ Details of the Innovator(s)	Brief details of the Innovative Technology
01.	The Rathindra KVK acting as a Technology Demonstration Centre	Rathindra KVK	This can overcome the problems faced by developing countries, especially the LDCs, of demonstrating technology utilization potential and promoting overall technology awareness. Science and technology exhibitions, both stationary and mobile, and school and mass media programmes are being undertaken by this KVK and these exhibitions (especially through organizing programmes on PM Kisan Samman Nidhi, National Girl Child Day, World Pulse Day, International Women's' Day, International Yoga Day, ICAR Foundation Day, Poshan Abhiyan & Tree Plantation Programme, PM Kisan Samman Sammelan, World Soil Day, Kisan Samman Diwas are necessary if the cultural aspects of technology transfer and development are to be addressed.
02.	The Rathindra KVK's Role in Information development	Rathindra KVK	The role of information in technology transfer and development is crucial, and therefore capacities are needed to ensure access to the information required for adequate technological capability. There is much information in the public domain that is useful for technology transfer and development. However, the information needed should go beyond simple inventories of costs and environmental parameters and should include specific technical data that will facilitate technology selection, development, and use. Keeping these factors in mind, the Rathindra KVK is developing Technological Modules in the forms of Extension Literatures like Booklets, Leaflets, Folders, Brochures, CDs, DVDs etc. using the information generated from its past research and extension activities as well as information generated from both the ICAR and SAU or CU Systems to meeting the information gaps prevalent among the practicing farmers, farm women, rural youths and extension functionaries of the district of Birbhum. This KVK also focuses on (a) information assessment and screening, (b)maximal use of electronic systems and (c) the development of relevant databases in Agriculture and related sectors.
03.	The Rathindra KVK's Role in Technology partnerships and networking	Rathindra KVK	Technology partnerships between the Rathindra KVK and reputed Governmental Organizations (GOs) and Non-Governmental Organizations (NGOs) have been very effective in technology development and transfer and market development, provided they are two-way relationships involving a long-term commitment with the objective of sharing knowledge, enhancing technological capabilities, fostering innovation, and strengthening competitiveness. Interaction and mutual dependency, as well as risk and cost sharing among partners, are important. The Rathindra KVK and its associated Networks consist of a group of institutions or associations with the aims of enhancing the capacity to conduct research and improving training and education through interaction. The Rathindra KVK thus forms a network to improve access to new ideas, methods, information sharing and materials exchange. Both technology partnerships and networking require a certain level of technical competence among partners. There are many such partnerships and networks among this KVK, reputed GOs and reputed NGOs and these activities are growing. This recent initiative shows that these partnerships and networks can foster technological upgrading and improvement and quicker and more efficient Extension activities at a much lower cost to each of the partners thus creating a Win-Win situation for all the partners.

3.9. a. Give details of indigenous technology practiced by the farmers in the KVK operational area which can be considered for technology development (in detail with suitable photographs)

Sl. No.	Crop / Enterprise	ITK Practiced	Purpose of ITK
01.	Broiler Farming	Aloe Vera leaves are crushed and mixed with sugar syrup at the rate 250 gm Aloe Vera leaves and 750 gm per 1000 Birds for 5 days	For treatment of Gout and Kidney dis-order in Broiler.

Sri Arijit Hazra of Village -Karchadihi, P. O. – Batikar, C. D. Block – Illambazar, Dist. – Birbhum with Aloe Vera Leaf to be crushed in Mixer-Grinder Machine for Treatment of Gout and Kidney Disorder of his Broiler Birds

Sri Arijit Hazra of Village -Kariachati, P. O. – Batikar, C. D. Block – Illambazar, Dist. – Birbhum extracting the Juice of the Aloe Vera Leaf crushed for Treatment of Gout and Kidney Disorder of his Broiler Birds

Sri Arijit Hazra of Village –Kariachati, P. O. – Batikar, C. D. Block – Illambazar, Dist. – Birbhum making sugar syrup and mixing the juice of Aloe Vera leaves with it for Treatment of Gout and Kidney Disorder of the Broiler Birds

Sri Arijit Hazra of Village –Kariachati, P. O. – Batikar, C. D. Block – Illambazar, Dist. – Birbhum mixing the juice of Aloe Vera leaves with sugar syrup for Treatment of Gout and Kidney Disorder of the Broiler Birds

b. Give details of organic farming practiced by the farmer.

Sl. No.	Crop / Enterprise	Area (ha)/ No. covered	Production	No. of farmers involved	Market available (Y/N)
01.	Production of Seasonal Vegetables without using chemical inputs	16 ha	2400 q of Seasonal Vegetables / Week in a harvesting season (Minimum 2 harvesting Seasons in a Year)	600	Yes

3.10. Indicate the specific training need analysis tools/methodology followed by KVKs

Sl. No.	Brief details of the tool/ methodology followed	Purpose for which the tool was followed
01.	Rathindra KVK family coordinates the work of all scientists for smooth functioning of the KVK as well as for the benefit of the rural people of that area. Senior Scientist and Head is liaising with other line departments for coordination and effective implementation of different programs of the KVK in the adopted village. Rathindra KVK tried to adopt a Cluster of 4 to 6 economically, culturally, and technologically backward villages situated within 10-20 Kms radius of the KVK. These villages are not too small or too large. Before adoption, a detailed survey of the village was conducted to study the socio-economic and cultural status of that village. Now-a-days Participatory Rural Appraisal (PRA) tool was used to conduct the survey in which the village people actively participated in the process. The village map was drawn with the help of different color by the villagers themselves and different prominent structures of the village such as school, temple, river, club etc. were depicted in that map. These structures will help the scientists to conduct the survey easily and smoothly. Based upon the survey the field crop maps, animal resource map and other ancillary maps were prepared for future use. After the survey work detailed plan of work was chalked out and depending upon the requirement different activities was undertaken in different areas by the Rathindra KVK scientists.	Training Need Assessment of Rathindra KVK Clientele viz. Practicing Farmers and Farm Women
02.	Rathindra KVK assesses the needs of the Rural Youth mainly through Participatory Tools like Resource map, transact map, Employment Opportunity Analysis, Job Availability Matrix, Job Choice Matrix, Un-Employment Problem Cause Diagram etc. and administering them a Structured Question Schedule regarding the needs of the Rural Youth prepared by the Rathindra KVK in consultation with other experts of ICAR and Visva-Bharati.	Training Need Assessment of Rathindra KVK Clientele viz. Rural Youths
03.	Rathindra KVK assesses the need of the Extension Functionaries mainly through questioning the respective clientele about their needs and their job needs and the needs of their sponsoring agencies. Here mainly PRA tools like problem – cause diagram, Resource map, Organizational Diagram, Job Analysis, Job Satisfaction Matrix etc. are used.	Training Need Assessment of Rathindra KVK Clientele viz. Extension Functionaries

3.11. a. Details of equipment available in Soil and Water Testing Laboratory

Sl. No	Name of the Equipment	Qty.
01.	Mixer grinder Kenstar	2 nos.
02.	Refrigerator Whirlpool	2 nos.
03.	Stabilizer Fizi	2 nos.
03.	Shaker	1 no
04.	Oven	1 no
05.	Kelplus Elect Digestation System Model KES 08L	1 no
06.	Kelplus Elect Distillation System Elite Ex	1 no
07.	Systronics Micro controller based visible Spectrophotometer	2 nos.
08.	Systronics P-H system	2 nos.
09.	Systronics Digital Conductivity Meter	2 nos.
10.	Systronics Flame Photometer Type 128	2 nos.
11.	Hotplate with energy regulator	1 no.
12.	Glass Distillation apparatus flux	3 nos.
13.	Physical Balance Cap.250g with weight box	4 nos.
14.	Shimadzu Electronic Balance	2 nos.
15.	Kjeldal digestion unit	2 nos.
16.	Kjeldal distillation unit	2 nos.
17.	Mridhha Parikshak (Digital Mini-Lab Solar Powered)	2 nos.
Total		**34 nos.**

3.11.b. Details of samples analyzed so far:

Number of soil samples analyzed.			No. of Farmers	No. of Villages	Amount realized. (In Rs.)
Through mini soil testing kit/labs	Through soil testing laboratory	Total			
155	-	155	155	24	13500.00

3.11.c. Details on World Soil Day

Sl. No.	Activity	No. of Participants	No. of VIPs	Name (s) of VIP(s)	Number of Soil Health Cards distributed.	No. of farmers benefitted
01.	Participatory Discussion on Soil Health Management Practices	139	03	**1.** Prof. Arun Kumar Barik, Principal, PSB (Institute of Agriculture), Visva-Bharati, Sriniketan, Birbhum – 731236 **2.** Prof. Goutam Ghosh, Professor, (Soil Science & Agril. Chemistry), PSB (Institute of Agriculture), Visva-Bharati, Sriniketan, Birbhum – 731236	31	55

3.12. Activities of rainwater harvesting structure and micro irrigation system

No of training programme	No of demonstrations	No of plant material produced	Visit by the farmers	Visit by the officials
06	03	56,000	1832	43

3.13. Technology week celebration

Type of activities	No. of activities	Number of participants	Related crop/livestock technology

3.14. RAWE/ FET programme - is KVK involved? (Y/N): Yes

Details of RAWE Programme organized by Rathindra KVK, Birbhum for the Students of B.Sc. (Hons.) Agriculture Course of Universities other than Visva-Bharati in the year of 2023

List of Students for RAWE programme 2023 at Rathindra KVK, Birbhum

Sl. No.	Name of KVK	Name of University	Students allotted by ATARI to KVK	Universities sent students directly to KVK	Total students enrolled in KVK	Date of Commencement of RAWE Programme	Date of Completion of RAWE Programme
01.	Rathindra KVK, Birbhum	SEACOM SKILLS UNIVERSITY (BATCH - I)	36	0	36	11.09.2023	11.10.2023
02.	Rathindra KVK, Birbhum	THE NEOTIA UNIVERSITY	26	0	24	12.09.2023	10.11.2023
03.	Rathindra KVK, Birbhum	Siksha 'O' Anusandhan (Deemed to be University)	10	0	10	22.09.2023	24.11.2023
04.	Rathindra KVK, Birbhum	SEACOM SKILLS UNIVERSITY (BATCH - II)	37	0	37	16.10.2023	10.10.2023
05.	Rathindra KVK, Birbhum	LOVELY PROFESSIONAL UNIVERSITY	1	0	1	01.11.2023	07.12.2023
06.	Rathindra KVK, Birbhum	CENTURIAN UNIVERSITY OF TECHNOLOGY AND MANAGEMENT	6	0	6	07.12.2023	06.02.2024
		Total	**116**	**0**	**114**		

No of student trained	No of days stayed
114 + Students of Palli Siksha Bhavana undergoing RAWE Programme (62)	-

ARS trainees trained	No of days stayed

3.15. List of VIP visitors (Minister/ MP/MLA/DM/VC/Zila Sabhadipati/Other Head of Organization/Foreigners)

Date	Name of the Person	Purpose of Visit
20.01.2023	Dr. Vikram Singh, Senior Scientist, IPRTM Unit, ICAR Head Quarters, New Delhi	To Visit KVK
08.02.2023	Dr. M. K. Naik, Former Vice Chancellor, UAHS and Director of Extension UAS, Raichur	Campus Visit of KVK
09.02.2023	Dr. K. M. Manjaiaw, Principal Scientist, ICAR-IARI, New Delhi	Campus Visit of KVK
09.02.2023	Dr. B. P. Dhyani, Prof. of Soil Science and Agricultural Chemistry, SVPUA & T, Meerut, U. P.	Campus Visit of KVK
28.02.2023	Dr. Md. Abdul Razak, Minister of Agriculture, Govt. of Peoples Republic of Bangladesh	As a part of University Visit
04.07.2023	Dr. Basanta Kumar Das, Director, ICAR – CIFRI, Barrackpore, Kolkata	As a part of collaborative programme between ICAR-CIFRI and RKVK
01.09.2023	Dr. Prabir Kumar Ghosh, Founder Director and Vice Chancellor, ICAR-National Institute of Biotic Stress Management Baronda, Raipur	To observe KVK activities
23.11.2023	Dr. R. Senthil Kumar, Principal Scientist, ICAR – IIHR, Bengaluru	As a part of collaborative programme between ICAR-IIHR and RKVK
23.11.2023	Dr. Sumangala H. P., Principal Scientist, Division of Flower and Medicinal Crop, ICAR – IIHR, Bengaluru	As a part of collaborative programme between ICAR-IIHR and RKVK

4. IMPACT

4.1. Impact of KVK activities (Not to be restricted for reporting period).

Name of the specific technology /Skill transferred	No. of participants	% of adoption	Change in income (Rs.)	
			Before (Rs. /Unit)	After (Rs. /Unit)
Seed production of paddy	70	85.72	Rs. 67/800 per ha	Rs. 1,03,200.00 per ha
Seed production of pulses	230	52.18	Rs. 31,600.00 per ha	Rs. 66,500.00 per ha
Varietal Replacement of Mustard with Improved Mustard variety NRCHB-1 and YSH04-1	170	88.24	Rs. 23,520.00 per ha	Rs. 73,800.00 per ha
Improved method of elephant's foot yam cultivation	207	89.00	Rs. 2,36,250.00 per ha	Rs. 14,17,500.00 per ha
Preparation and use of vermin composting	290	62.07	nil	Rs. 19000.00 per 2.5 ft x2.0 ft x 3.0 ft area /year
Breed adaptation of improved Poultry breed RIR	65	75.45	Rs. 6853.00 per household for 20 birds capacity reared in Back yard condition.	Rs. 11,750.00 per household for 20 birds capacity reared in Back yard condition
Area specific mineral mixture for lactating dairy cow	110	82.32	Rs. 10,218.00 /year/cow	Rs. 14,737.00 /year/cow

NB: Should be based on actual study, questionnaire/group discussion etc. with ex-participants.

4.2. Cases of large-scale adoption (Please furnish detailed information for each case)

Give information in the same format as in case studies.

Horizontal Spread of Technologies	
Technology	**Horizontal spread**
Seed Production of Paddy	60 farmers Trained in the Rathindra KVK on various aspects of Paddy Seed Production adopted the Technology and from them the Technology was spreaded with culminating effect of adoption among another 120 numbers of farmers of whom 32 numbers of farmers resided within 0.1 – 5 kms. Radius of the Rathindra KVK; 40 numbers of farmers resided within 5.1 – 10 kms. Radius of the Rathindra KVK; 24 farmers resided within 10.1 – 15 kms. Radius of the Rathindra KVK and the rest 24 numbers of the farmers resided within 15.1 kms and above radius of the Rathindra KVK.
Seed Production of Pulses	120 farmers Trained in the Rathindra KVK on various aspects of Pulse Seed Production adopted the Technology and from them the Technology was spreaded with culminating effect of adoption among another 70 numbers of farmers of whom 19 numbers of farmers resided within 0.1 – 5 kms. Radius of the Rathindra KVK; 23 numbers of farmers resided within 5.1 – 10 kms. Radius of the Rathindra KVK; 14 farmers resided within 10.1 – 15 kms. Radius of the Rathindra KVK and the rest 14 numbers of the farmers resided within 15.1 kms and above radius of the Rathindra KVK.
Varietal Replacement of Mustard with Improved Mustard Variety RW – 351	150 farmers Trained in the Rathindra KVK on various aspects of Cultivation of Improved Mustard Variety RW – 351 adopted the Technology and from them the Technology was spreaded with culminating effect of adoption among another 100 numbers of farmers of whom 27 numbers of farmers resided within 0.1 – 5 kms. Radius of the Rathindra KVK; 34 numbers of farmers resided within 5.1 – 10 kms. Radius of the Rathindra KVK; 20 farmers resided within 10.1 – 15 kms. Radius of the Rathindra KVK and the rest 19 numbers of the farmers resided within 15.1 kms and above radius of the Rathindra KVK.
Improved Method of Elephant's Foot Yam Cultivation	185 farmers Trained in the Rathindra KVK as well as 110 of them were involved in the FLD Programmes of Rathindra KVK on various aspects of improved method of Elephant's Foot Yam Cultivation adopted the Technology and from them the Technology was spreaded with culminating effect of adoption among another 118 numbers of farmers of whom 31 numbers of farmers resided within 0.1 – 5 kms. Radius of the Rathindra KVK; 39 numbers of farmers resided within 5.1 – 10 kms. Radius of the Rathindra KVK; 24 farmers resided within 10.1 – 15 kms. Radius of the Rathindra KVK and 20 numbers of the farmers resided within 15.1 kms and above radius of the Rathindra KVK. **It was necessary to mention here that 4 numbers of farmers of the neighbouring Dumka District of the Jharkhand State also adopted the above-mentioned Technology through the horizontal spread of the Technology.**
Low-Cost Fish Feed Preparation	25 farmers Trained as well as getting involved in the FLD Programmes of the Rathindra KVK on various aspects of low-cost fish feed preparation adopted the Technology and from them the Technology was spreaded with culminating effect of adoption among another 12 numbers of farmers of whom 03 numbers of farmers resided within 0.1 – 5 kms. Radius of the Rathindra KVK; 04 numbers of farmers resided within 5.1 – 10 kms. Radius of the Rathindra KVK; 02 farmers resided within 10.1 – 15 kms. Radius of the Rathindra KVK and the rest 03 numbers of the farmers resided within 15.1 kms and above radius of the Rathindra KVK.
Replacement of Deshi Poultry Breed by Rhode Island Red Breed (RIR)	309 farmers Trained as well as getting involved in the FLD Programmes of the Rathindra KVK on various aspects of replacement of local Deshi Poultry Breed by introduction of High Yielding Poultry Breed viz. Rhode Island Red (RIR) adopted the Technology and from them the Technology was spreaded with culminating effect of adoption among another 512 numbers of farmers of whom 302 numbers of farmers resided within 0.1 – 5 kms. Radius of the Rathindra KVK; 109 numbers of farmers resided within 5.1 – 10 kms. Radius of the Rathindra KVK; 23 farmers resided within 10.1 – 15 kms. Radius of the Rathindra KVK and the rest 78 numbers of the farmers resided within 15.1 kms and above radius of the Rathindra KVK.
Preparation and Use of Vermin-Composting	180 farmers Trained in the Rathindra KVK on various aspects of preparation and use of Vermin-Composting adopted the Technology and from them the Technology was spreaded with culminating effect of adoption among another 110 numbers of farmers of whom 29 numbers of farmers resided within 0.1 – 5 kms. Radius of the Rathindra KVK; 37 numbers of farmers resided within 5.1 – 10 kms. Radius of the Rathindra KVK; 22 farmers resided within 10.1 – 15 kms. Radius of the Rathindra KVK and the rest 22 numbers of the farmers resided within 15.1 kms and above radius of the Rathindra KVK.
Fodder Cultivation	350 farmers involved in FLD programme entitled quality fodder cultivation both leguminous and non-leguminous of Rathindra Krishi Vigyan Kendra. From them the Technology was spreaded with culminating effect of adoption among another 312 numbers of farmers of whom 302 numbers of farmers resided within 0.1 – 5 kms. Radius of the Rathindra KVK; 109 numbers of farmers resided within 5.1 – 10 kms. Radius of the Rathindra KVK; 23 farmers resided within 10.1 – 15 kms. Radius of the Rathindra KVK and the rest 78 numbers of the farmers resided within 15.1 kms and above radius of the Rathindra KVK.

4.3. Details of impact analysis of KVK activities carried out during the reporting period.

Sl. No.	Brief details of technology	Impact of the technology in subjective terms			Impact of the technology in objective terms	
		Productivity / Yield		Numbers of Farmers adopted the Technology	Change in Income due to Activities of KVK	
		Before Adoption of new technology	After Adoption of new technology		Before Adoption of new technology	After Adoption of new technology
1.	Low-cost feed preparation for lactating dairy cattle	Milk yield. 58 kg/wk/cow	Milk yield. 62 kg/wk/cow	51	Rs.59080.00/year/cow	Rs.84288.00/year/cow
2.	Improved new variety of Black gram as crop diversification. Black gram variety Indira Urd Pratham	6 q/ha	10 q/ha	359	Rs.17950.00 per ha	Rs.46100.00 per ha
3.	Improved new variety of Sesame as crop diversification. Sesame variety Suprava	7.7 q/ha	11 q/ha	353	Rs.25950.00 per ha	Rs.43500.00 per ha

4.4. Details of innovations recorded by the KVK.

Thematic area	Poultry Production
Name of the Innovation	Hand-made low-cost Incubator

Details of Innovator	Amit Ghosh, Vill-Galundi (Paschim Para), P.O.-Galundi, Bolpur, Dist.-Birbhum, 731240, West Bengal
Background of Innovation	Amit Ghosh was an electrician. Rathindra Krishi Vigyan Kendra identified his technical skill and motivated him to develop homemade incubator in 2017-18. He started to build up the incubator in the same year and began poultry rearing in both backyard and deep litter system.
Technology details	Handmade Incubator (operated by both Main line Electric and Inverter current) of 100 to 2000 egg hatching capacity with around 8 cycles in a year.
Practical Utility of Innovation	i)Nowadays he is earning Rs. 22000/ per month from his poultry keeping and related venture ii) The marketing of this homemade incubator was extended by Rathindra KVK by linking with different SHGs, Agricultural Technology Management Agency (ATMA) and other poultry farmers. iii) Using the low-cost incubator continuous production of rural backyard poultry chicks e.g., Vanraja, RIR, Aseel, Kadaknath etc. to members of Women Self Help Group is possible.

Amit Ghosh, Vill-Galundi (Paschim Para), P.O.-Galundi, Bolpur, Dist.-Birbhum, 731240, West Bengal Birbhum along with his Innovative Handmade Low-Cost Incubator



4.5. Details of entrepreneurship development

Entrepreneurship development	
Name of the enterprise	Mushroom farming and development
Name &complete address of the entrepreneur	Nupur Mondal, Village - Gournagar, P.O.- Kabilpur, Dist - Birbhum Pin-73 1132, West Bengal Mobile Phone No.-9153053739
Role of the KVK with quantitative data support	Mushroom is a complete, health food and suitable for all age groups, child to aged people. Mushrooms are rich in protein, dietary fiber, vitamins, and minerals. The digestible carbohydrate profile of mushroom includes starches, disaccharides, amino sugars, sugar alcohols and sugar acids. The total carbohydrate content in mushroom varied from 26- 82% on dry weight basis in different mushrooms. Mushrooms do not have cholesterol. The crude protein content of mushrooms varied from 12-35% depending upon the species. Smt. Nupur Mondal, give an enormous effort to develop the spawn production as well as mushroom cultivation. She was well trained and now she acts as a master trainer of different mushroom cultivation related programme of Govt. and non-Govt sector. The Rathindra KVK provides complete package and practices of mushroom spawn production and cultivation
Timeline of the entrepreneurship development	Before Rathindra KVK intervention Nupur Mondal completed M. A .in Bengali from Visva-Bharati University. She lost her father at childhood. She with his mother and a younger brother tried hard to overcome the hardship. Her family has 6 bighas of land where the family produced rice, potato, seasonal vegetables etc. in traditional method but the remuneration they earned was not enough. At that time in quest of new venture to support her family Nupur Mondal started producing oyster mushroom for her household consumption in 2014 in small scale by getting spawn from local market. Later in 2021 she got training from Rathindra KVK for commercial mushroom production. Till then she is producing mushroom for commercial purpose in a bigger way and built-up marketing linkage to the adjacent areas also. Present situation: A. agricultural activities: cultivation of paddy, potato, cabbage, cauliflower etc. B. Nonagricultural activities: Mushroom production and development
Technical components of the enterprise	• Spawn production techniques. • Contamination management • Mushroom production techniques • Insect pest and disease management • How to prepare production house • Sanitization of production house
Status of the enterprise	**A. Income from mushroom:** Room Size: 25 feet X 10 feet Production per day- 15 kg X 30 days X 9 month = 4050 kg Rate Rs 80.00 per kg Gross income from Fresh mushroom Rs. 3, 24,000.00 Gross expenditure Rs. 1, 15,000.00 **Net Income: 2, 09,000.00** **B. Spawn Production:** Room Size: 10 feet X 10 feet Production per day- 100 Pack X 15 days X 9 month = 13500 packets Rate Rs 25.00 per pack Gross income from spawn Rs. 3, 37,500.00 Gross expenditure Rs. 1, 80,000.00 **Net Income: 1, 57,500.00** **Total gross income (A+B) = Rs.3,66,500.00 per year**

Present working condition of the enterprise in terms of raw materials availability, labour availability, consumer preference, marketing the products etc. (Economic viability of the enterprise)	Raw material like spawn purchased from local market. Agri residue is procured from their own agricultural land. She formed Gournagar Swastik Samahar Society to execute her work and involved 50 (fifty) workers from Gournagar Swastik Samahar Society. Different products of oyster mushroom like mushroom pickles etc. is being familiar at the local adjacent areas by Gournagar Swastik Samahar Society under her leadership. She is selling fresh mushroom at local market like gournagar, patelnagar, suri, Sainthia etc.
Horizontal spread of the enterprise	50(fifty) workers of the Gournagar Swastik Samahar Society are involved in this programme. She donated 21 (twenty-one) barrels to the local tribal families (Name of the village- Sarbasia) to make mushroom production more familiar amongst them. She trained self-help group members and organized different mushroom picnics along with the villagers of adjacent villages which attracted young unemployed rural youth towards her. Awareness programmes on mushroom production technology conducted by Nupur Mondal proved to play a pivotal role for local farmers eager to delve into the world of mushroom production. She obtained "Visva-Bharati Certificate of Excellence" for her achievement

4.6. Any other initiative taken by the KVK.

Short Term Research: Funded by ATMA, Birbhum

"Prevention and control of piglet anaemia by oral supplementation of Iron in sows and their piglet"

Treatments:	
T1= Sows-Farmers Practice	Piglet- Farmers Practice
T2= Sows- F P + Oral Fe supplementation	Piglet- FP
T3= Sows- FP	Piglet- F P + Oral Fe supplementation
T4= Sows- F P + Oral Fe supplementation	Piglet- F P + Oral Fe supplementation

Total no. of piglets: 40 (32 female and 8 male)

5. LINKAGES

5.1. Functional linkage with different organizations

Name of Organization	Nature of linkage
Palli Sanghatana Vibagh, Visva-Bharati, Sriniketan, Birbhum	This linkage is mainly focusing on organizing joint Training programmes for the villagers as well as giving exposure to the clientele of the Rathindra KVK as about the field level situation
All India Radio, Santiniketan Kendra, Birbhum, West Bengal	Broadcasting of different Rathindra KVK activities as well as live Phone –In Programmes are being organized.
Doordarshan, Santiniketan Kendra, Birbhum, West Bengal	Telecasting of different Rathindra KVK activities as well as live phone –In Programmes are being organized. As a result, a vast number of farmers, farm women and rural youth are being exposed to multiple information sources regarding multiple issues. This is necessary to mention that the viewers of these Programmes have been immensely benefited by viewing Method Demonstration on various new Technologies.

Bidhan Chandra Krishi Vishwavidyalaya, Mohanpur, Nadia, West Bengal	This linkage is mainly on the following aspects: - - Conducting regular basis Human Resource Development Training Programme in different discipline. - Facilitate Annual Action Plan Development. - Facilitate On Farm Testing Modules. - Provide different location specific germplasm.
West Bengal University of Animal and Fishery Sciences, Belgachia, Kolkata, West Bengal	This linkage is mainly on the following aspects: - - Conducting regular basis Human Resource Development Training Programme in different discipline. - Facilitate Annual Action Plan Development. - Facilitate On Farm Testing Modules. - Provide different location specific mineral mixture, vaccines, medicines, seeds of Improved Varieties of Green Fodder Crops.
ICAR-Indian Institute Agricultural Biotechnology, Ranchi, Jharkhand	The linkage is mainly based on the establishment of Custom Hiring Centre at Rathindra KVK, Sriniketan.
ICAR-CIFRI, Barrackpore	For collaborating training and demonstration on CIFRI fish feed, Scientific fish cultivation.
ICAR-National Dairy Research Institute (NDRI), Eastern Regional Station (ERS), Kalyani, West Bengal	This Linkage is basically for organizing the Collaborative Animal Health Camps, Cattle Infertility Treatment Camps, Hybrid Napier Distribution Camps and for organizing Front Line Demonstrations on improved varieties of Fodder Crops like Berseem, Oat etc.
ICAR – IIHR, Bengaluru	This Linkage is basically for organizing collaborative training programme and distribution of critical inputs like high yielding vegetable seeds developed by ICAR-IIHR
Coconut Development Board, State Centre – Kolkata, Ministry of Agriculture and Farmers Welfare, Govt. of India	This Linkage is basically for organizing demonstration and Skill Development Training Programme on "Friends of Coconut Trees (FoCT)" for unemployed Rural Youths.
Regional Fodder Station, Kalyani, Ministry of Agriculture and Farmers' Welfare, Govt. of India, Nadia, West Bengal	This Linkage is basically for organizing the Front-Line Demonstration (FLD) Programmes on various Improved Varieties of Green Fodder.
ICAR-Indian Grassland and Fodder research Institute (IGFRI), Jhansi, Uttar Pradesh	This Linkage is basically for organizing the Front-Line Demonstration (FLD) Programmes on various Improved Varieties of Green Fodder.
Agriculture Skill Council of India (ASCI), National Skill Development Corporation (NSDC), Ministry of Skill Development and Entrepreneurship, Govt. of India, New Delhi	This linkage is for Training of Trainers, formulation of Training Courses, assessment and providing Skill Training Certificates to the Trainees of ASCI Skill Training Courses like Hatchery Production Worker, Animal Health Worker, Agriculture Extension Service Provider etc.
National Institute of Agricultural Extension Management (MANAGE), Ministry of Agriculture and Farmers' Welfare, Govt. of India, Hyderabad, Telangana	This linkage is for providing Human Resource Development Training to KVK Scientists as well as for organizing Diploma in Agricultural Extension Services for Input Dealers (DAESI), a Long Duration Skill and Entrepreneurship Development Training Programmes for the Agricultural Input Dealers for developing them as grass-root level Extension Functionaries.
Line Departments like Agriculture, Horticulture and Food Processing Industries, Animal Resource Development, Fisheries etc. of the Govt. of West Bengal, Birbhum,	This linkage is basically on Technological backstopping of the Extension and developmental activities of various developmental departments of the Govt. of West Bengal.
National Research Centre on Weed Control, Jabalpur, Madhya Pradesh	The linkage is now focusing on Technical Support for organizing Training and Awareness Camps for controlling weeds like *Parthenium*. The farmers of this District get immense benefit as they get exposure on *Parthenium* and other weeds through participating in "*Parthenium* Control Week Programme".
Agricultural Technology Management Agency (ATMA), Birbum, Suri, Birbhum, W.B	The linkage is now focusing on Orientation Farmers' training and Programme Training for Headmaster / Achiever Farmer. Various Short-Term Research on Topics related with Fishery, Agronomy etc. are also being performed utilizing these linkages Programme.
Agricultural Technology Management Agency (ATMA), Various Districts of West Bengal	The linkage is now focusing on organizing Exposure Visits of the members of the various Block Farm Information and Advisory Centre (FIAC) Teams at the Rathindra KVK for a firsthand experience on cutting edge technologies and products related to agriculture and related sectors as well as for undergoing relevant knowledge and skill development training programmes at the Rathindra KVK, Birbhum.
Agricultural Technology Management Agency (ATMA), Paschim Bardhaman, West Bengal	For Setting of IFS model in Paschim Bardhaman District.
National Bank for Agriculture and Rural Development (NABARD), Birbhum, Suri, Birbhum, West Bengal	The linkage mainly focuses on formation of Farmers Club and Farmers' Producers' Organization (FPO) organizing Training for vulnerable areas, Organizing Technology Weeks etc. Some Farmers' Clubs and FPOs are doing excellent work and they are benefitted from this Linkage. Besides above-mentioned Linkages, NABARD, Birbhum sponsored the Technology Week – 2015 and Technology Week - 2016, organized by the Rathindra KVK in its Campus. The NABARD has also sponsored Skill Development Trainings in the Farm Sectors in the Financial Year of 2015 – 2016.
State Agricultural Management, Extension and Training Institute (SAMETI), Narendrapur, 24 Parganas (South), West Bengal.	This linkage is mainly on the following aspects. - Conducting regular basis Human Resource Development Training Programme in different discipline for Scientists of the Rathindra KVK. - All the linkage activities profoundly help the KVK clientele in updating their knowledge, skill and attitude.

Luthern World Services, Kolkata, West Bengal	This linkage gives importance as well as focuses on Training and Demonstration for stakeholders for far flung areas of Birbhum District, especially areas bordering Jharkhand State where Institutional Linkages with villagers of those areas are very weak.
Asansol Burdwan Seva Kendra, Burdwan, West Bengal	This linkage gives importance as well as focuses on joint Training and Demonstration for stakeholders for various non-adopted villages of Birbhum District as well as far flung areas of Birbhum District, especially areas where Institutional Linkages with villagers of those areas are very weak.
Reliance Foundation	For Conducting Online Training Programmes.
Invati Creations Pvt. Ltd.	Project on Trails for Bio Stimulants in different crops.
Rain Bow Agro-Sciences Pvt. Ltd., Gujrat	Project on Trial for Lufenuron in Black gram.
Bolpur Krishija Samabay Samity, Bolpur, Birbhum, West Bengal	This linkage is basically focuses on supply of quality agricultural inputs for various FLD and OFT Programmes of the Rathindra KVK undertakes. As a result, the clientele of the Rathindra KVK is immensely benefitted through experiencing newer and better-quality agricultural inputs.
National Seed Corporation, Kolkata, West Bengal	This linkage is basically focuses on supply of quality breeder and foundation seeds of various Crops for various FLD and OFT Programmes of the Rathindra KVK undertakes. As a result, the clientele of the Rathindra KVK is immensely benefitted through experiencing newer and better-quality seeds.
West Bengal State Seed Corporation, Kolkata, West Bengal	This linkage is basically focuses on: Production of foundation and Certified seeds of different crops at KVK farm. Supply of quality breeder and foundation seeds of various Crops for various FLD and OFT Programmes of the Rathindra KVK undertakes. As a result, the clientele of the Rathindra KVK is immensely benefitted through experiencing newer and better-quality seeds.
Panchayati Raj Institutions (PRIs), Birbhum, West Bengal	This linkage helps the Rathindra KVK to get base-line information for choosing Target Areas both on Geographical Terms as well as on Technological Terms by going through various surveys and reports generated by the PR Institutions of the Birbhum District.
Other Krishi Vigyan Kendras (KVKs)	This linkage helps the farmers of various Districts to have an exposure and visit to Rathindra KVK and exchange ideas and experiences with farmers of the District of Birbhum and Scientists of the Rathindra KVK.

5.2. List of special programmes undertaken during 2023 by the KVK, which have been financed by ATMA/ Central Govt/ State Govt./NABARD/NHM/NFDB/Other Agencies (information of previous years should not be provided)

a) Programmes for infrastructure development: No such programme

Name of the programme/ scheme	Purpose of programme	Date/ Month of initiation	Funding agency	Amount (Rs.)

(b) Programme for other activities (training, FLD, OFT, Mela, Exhibition etc.)

Name of the Programme/Scheme	Purpose of Programme	Date/ Month of Initiation	Funding Agency	Amount (Rs.)
Short Term Research	To find out the best way for prevention and control of piglet anemia	November, 2023	ATMA, Birbhum	2.5 lakh
Establishment of Custom Hiring Centre	To provide agril. Machinery to the farmers with very low rent for reducing cost of cultivation	January, 2023	ICAR-IIAB, Ranchi	18.30 lakh
Demonstration and sensitization programme on ornamental Fish	To create new avenue of income generation	July, 2023	ICAR-CIFRI, Barrackpore	All the inputs (amounting 10 lakh) supplied directly by CIFRI
STRY programme	To impart skill to rural youth on Bee Keeping and Goat Rearing	October, 2023	SAMETI, West Bengal	0.84 lakh
Capacity Building programme on IIHR Technologies	To aware the new technologies on horticulture developed by IIHR	November, 2023	ICAR-IIHR, Bangalore	All the inputs (amounting 4lakh) supplied directly by IIHR
FOCT programme	To impart skill of nourishing the coconut trees scientifically	January 2023	Coconut Development Board, Govt of India	0.565 lakh
Capacity building of SC farmers and farm women	To distribute different small scale agricultural inputs	September, 2023	ICAR-IIAB, Ranchi	8.51 lakh

6. PERFORMANCE OF INFRASTRUCTURE IN KVK

6.1. Performance of demonstration units (other than instructional farm)

Sl. No.	Name of demo Unit	Year of estt.	Area (Sq.mt)	Details of production			Amount (Rs.)		Remarks
				Variety/breed	Produce	Qty.	Cost of inputs	Gross income	
01.	Mush room production unit	2020	15	Oyster Mushroom	Mushroom	3 kg	250	300.00	
02.	Bee Keeping Unit	2022	40 boxes	Apis indica	Honey	24 kg	3500	12,250.00	
	Total					**27**	**3,800**	**12,550.00**	

6.2. Performance of Instructional Farm (Crops)

Name of the crop	Date of sowing	Date of harvest	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Type of produce	Qty. (q)	Cost of inputs	Gross Income	

Sesamum	09.03.2023	17.06.2023	0.13	Suprava	TL seeds	1.2	4500	12600	Pre-Kharif, Kept in godown
Green Gram	11.03.2023	20.06.2023	0.065	Samrat	TL seeds	0.5	2300	5250	Pre-Kharif, Kept in godown
Black Gram	12.03.2023	26.06.2023	0.13	Pu-31	CS	1.15	4400	12000	Pre-Kharif, Distributed
Elephant foot Yam	25.03.2023	20.09.2023	0.005	Bidhan Kusum	Corm (Seeds)	2.50	5000	15000	Pre-Kharif, Kept in godown
Rice bean	26.03.2023	29.03.2023	0.26	Bidhan-1	TL	1.75	5900	14000	Pre-Kharif, Distributed
Black Gram	11.08.2023	27.11.2023	1.3	PU-31	FS	10.4	80000	109200	Kharif, Kept in godown
Black Gram	12.08.2023	29.11.2023	0.13	Indira Urd	TL seeds	1.0	4300	10500	Kharif
Turmeric	08.07.2023	--	0.26	Saguna	TL Seeds	--	---	---	Kharif, not harvested
Ekangi	10.07.2023	---	0.26	K. galana	TL seeds	----	---	----	Kharif, Not harvested
Paddy	15.07.2023	20.11.2023	0.11	MTU-1153	CS	3.9	9750	15600	Kharif, Kept in godown
Paddy	16.07.2023	11.12.2023	0.16	CR Dhan-800	CS	7.7	19480	30800	Kharif, Kept in godown
Paddy	16.07.2023	21.12.2023	0.42	Rani Dhan	CS	20.16	50600	80640	Kharif, Kept in godown
Paddy	16.07.2023	20.12.2023	0.13	Dhiren	FS	5.31	13000	23895	Kharif, Kept in godown
Paddy	16.07.2023	22.12.2023	0.13	Gobindobhog	Rice	3.5	8000	35000	Kharif, Kept in godown
Paddy	16.07.2023	28.12.2023	0.13	Randuni pagal	Rice	3.0	8000	33000	Kharif, Kept in godown
Paddy	16.07.2023	13.12.2023	0.065	Local Scented	Rice	3.2	7520	32000	Kharif, Kept in godown
FingerMillet	29.07.2023	30.11.2023	0.13	Indravati	CS	2.6	85000	25000	Kharif, Kept in godown
Lentil	24.11.2023	----	0.13	L-4717	FS	--	---	---	Rabi, not harvested
Lentil	25.11.2023	----	0.39	WBL-77	CS	--	---	---	Rabi, not harvested
Chickpea	26.11.2023	----	0.26	Purva	CS	--	---	---	Rabi, not harvested
Chickpea	26.11.2023	-----	0.13	Purva	FS	--	---	---	Rabi, not harvested
Mustard	28.11.2023	----	0.01	PM-30	CS	--	---	---	Rabi, not harvested
Rice bean	28.11.2023	-----	0.26	Bidhan-1	TL	--	---	---	Rabi, not harvested
Oat	06.12.2023	--------	0.26	Kent	TL	--	---	---	Rabi, not harvested
Potato	21.12.2023	------	0.065	K. Jyoti	Vegetable	--	---	---	Rabi, not harvested

6.3. Performance of Production Units (bio-agents / bio-pesticides/ bio-fertilizers etc.,)

Sl. No.	Name of the product	Qty (Kg)	Amount (Rs.)		Remarks
			Cost of inputs	Gross income	
01.	Azolla	4500	18000	270000	
02.	Vermicompost	10000	13000	150000	
03.	Earth worm	150000	10000	75000	

6.4. Performance of instructional farm (livestock and fisheries production)

Sl. No.	Name of the animal/bird/aquatics	Details of Production			Amount (Rs.)		Remarks
		Breed	Type of Produce	Qty (q)	Cost of inputs	Gross income	
01.	Composite fish	Rohu, Katla, Mrigel, Bata etc	Table Fish	6.5	3500	7000	
02.	Fish	Singhi	Table Fish	0.5	5000	14000	
03.	Poultry	Coloured Broiler	Advanced Grower	88 nos.	Rs.2250.00	Rs.6189.00	
		Coloured Broiler	Cock	05 nos.	Rs.2250.00	Rs.3750.00	
		Kadaknath	Chicks	346 nos.	Rs.17000.00	Rs.28,100.00	
		Kadaknath	Advanced Grower	35 nos.	Rs. 2350.00	Rs.6230.00	
		Aseel	Cock	03 nos.	Rs. 950.00	Rs.1920.00	
		Kaveri	Advanced Grower	19 nos.	Rs.1080.00	Rs. 1554.00	
		Kaveri	Cock	01 nos.	Rs. 260.00	Rs. 500.00	
		G. Fowl	Advanced Grower	32 nos.	Rs.3620.00	Rs. 5090.00	
		G. Fowl	Adult	01 nos.	Rs.180.00	Rs. 312.00	
		Turkey	Advanced Grower	01 nos.	Rs. 210.00	Rs. 330.00	

6.5. Utilization of hostel facilities

Accommodation available (No. of beds): 21

Months	No. of trainees stayed	Trainee days (Days stayed)	Reason for short fall (if any)
January, 2023	3	3	Due very low refreshment cost per trainee per day (Rs. 150 for whole day and night) the number of residential trainings has been reduced.
February, 2023	-		
Mach, 2023	-		
April, 2023	4	28	
May, 2023	-		
June, 2023	-		
July, 2023	-		
August, 2023	14	70	
September, 2023	16	224	
October, 2023	-		
November, 2023	-		
December, 2023	10	20	
Total	**47**	**345**	

6.6. Utilization of staff quarters: N/A

Whether staff quarters have been completed:

No. of staff quarters:

Date of completion:

Occupancy details:

Months	Q I	Q II	Q III	QIV	Q V	QVI

7. FINANCIAL PERFORMANCE

7.1. Details of KVK Bank accounts

Bank account	Name of the bank	Location	Account Number
Visva-Bharati University A/c. Krishi Vigyan Kendra A/c. No. 10598447180	State Bank of India	Santiniketan, P. O. – Santiniketan, Dist. – Birbhum, Pin. – 731235, West Bengal.	10598447180

7.2. Utilization of funds under CFLD on Oilseed *(Rs. In Lakhs)*

Item	Sanctioned by ICAR		Expenditure		Unspent balance as on 31st December, 2023
	Rabi	Kharif	Rabi	Kharif	
Sesame	-	2.50	-	2.26	0.24

7.3. Utilization of funds under CFLD on Pulses *(Rs. In Lakhs)*

Item	Sanctioned by ICAR		Expenditure		Unspent balance as on 31st December, 2023
	Rabi	Kharif	Rabi	Kharif	
Black Gram	-	3.60	-	3.28	0.32

7.4 Utilization of KVK funds during the year 2023-24 (as on 31.12.2023) (Not audited)

Sl. No.	Particulars	Sanctioned	Released	Expenditure (as on 31.12.2023)
A. Recurring Contingencies				
1	Pay & Allowances	130.00	106.49	102.49
2	Traveling allowances	02.00	-	00.63
3	Contingencies	32.00	23.40	15.82
3	HRD	00.30	-	-
A	Stationary			
B	POL			
C	Meals			
D	Training material			
E	Front Line Programme			
F	On Farm Trial			
G				
H				
O	SCSP			
J	Swachhta Expenditure			
TOTAL (A)		**164.30**	**129.89**	**118.94**
B. Non-Recurring Contingencies				
1	Equipment Furniture (Replacement of Tractor accessories)	-	-	-
2	Works (Boundary wall cum fencing)	-	-	-
3	Vehicle (Four-Wheeler Replacement)	-	-	-
4	Library	00.10	0.10	-
TOTAL (B)		00.10	00.10	-
C. REVOLVING FUND				
GRAND TOTAL (A+B+C)		**164.40**	**129.99**	**118.94**

7.5. Status of revolving fund (Rs. in lakh) for last three years

Year	Opening balance as on 1st April	Income during the year	Expenditure during the year	Net balance in hand as on 1st April of each year (Kind + cash)
2019-20	3.98	2.86	1.40	5.44
2020-21	5.44	2.57	3.05	4.96
2021-22	4.96	5.76	2.79	7.93
2022-23	7.93	8.20 (as on 31.12.2022)	3.89 (as on 31.12.2022)	12.24 + (Kind) 4.23 (as on 31.12.2022)
2023-24	9.66	1.84 (as on 31.12.2023)	5.07 (as on 31.12.2023)	6.43 + Kinds (as on 31.12.2023)

7.6. (i)Number of SHGs formed by KVKs - 01

(ii)Association of KVKs with SHGs formed by other organizations indicating the area of SHG activities – 03 Numbers of SHGs involved in (a) Certified Seed Production of Paddy, Pulses and Oilseeds; (b) Production of Vermi-Compost, and (c) Production of Mushroom.

(iii) Details of marketing channels created for the SHGs – Rathindra KVK is acting as Linkage between the members of SHGs and "SUFAL BANGLA", an initiative by the Dept. of Agricultural Marketing for marketing the products of SHGs through Mobile Vans and Stationery Showrooms and from this Year the Rathindra KVK is an active partner of the RKVY Sponsored Project on "Up-gradation of Market-Linkage Network for Promotion of Bengal Aromatic Rice", being executed by the Department of Agronomy, Bidhan Chandra Krishi Vishwavidyalaya, P. O. – Krishi Vishwavidyalaya, Dist. - Nadia, Pin. – 741252, West Bengal, India for promoting the production and marketing of the traditional aromatic Paddy Variety of Birbhum District viz. Radhunipagol by the members of the SHGs.

7.7. Joint activity carried out with line departments and ATMA.

Name of Activity	Number of Activity	Season	With Line Department	With ATMA	With Both
ATMA BFAC	04	Kharif and Rabi, 2023	-	With ATMA	-
ATMA GB Meeting	02	Kharif and Rabi, 2023	-	With ATMA	-
Training of Lead Farmers of Goat Husbandry related Cluster	01	Rabi, 2023	With Line Department	-	-
GB Meeting of PKVY	01	Rabi, 2023	With Line Department	-	-
Short Term Research	01	Rabi, 2023	-	With ATMA	-
Meeting and Discussion on Production of Certified Fodder Seeds	02	Kharif and Rabi, 2023	With Line Department	-	-
Establishment of Integrated Farming Cluster	03	Throughout the year	With Line Department	-	-

8. Other information

8.1. Prevalent diseases in Crops

Name of the disease	Crop	Date of outbreak	Area affected (in ha)	% Commodity loss	Preventive measures taken for area (in ha)

8.2. Prevalent diseases in Livestock/Fishery

Name of the disease	Species affected	Date of outbreak	Number of death/ Morbidity rate (%)	Number of animals vaccinated	Preventive measures taken in pond (in ha)

9.1. Nehru Yuva Kendra (NYK) Training

Title of the training programme	Period		No. of the participant		Amount of Fund Received (Rs)
	From	To	M	F	

9.2. PPV & FR Sensitization training Programme

Date of organizing the programme	Resource Person	No. of participants	Registration (crop wise)	
			Name of crop	No. of registration

9.3. *mKisan* Portal (National Farmers' Portal/ SMS Portal)

Type of Message	No. of Messages	No. of Farmers covered
Crop	10	20,332
Livestock	10	12,745
Fishery	-	-
Weather	3720	1,619
Marketing	36	12,102
Awareness	03	1,720
Training Information	12	9,683
Other	-	-
Total	**3791**	**58201**

9.4. *KVK* Portal and Mobile App

Sl. No.	Particulars	Description
1.	No. of visitors visited the portal	**24,487**
2.	No. of farmers registered in the portal	-
3.	Mobile Apps developed by KVK	-
4.	Name of the App	-
5.	Language of the App	-
6.	Meant for crop/ livestock/ fishery/ others	-
7.	No. of times downloaded	**-**

9.5. a. Observation of Swachh Bharat Programme

Date / Duration of Observation	Activities undertaken
15.09.2023	All the staff of the Rathindra KVK have made a wholehearted effort to clean the Office Building Complex of the KVK through cleaning the dusts, cobwebs, weeding out the weeds etc. through manual work.
16.09.2023	All the staff of the Rathindra KVK tried their level best to clean the garbage, dust and debris accumulated on the Roof of the Administrative Building through the manual work.
17.09.2023	All the staff of the Rathindra KVK tried their level best to clean the garbage, dust and debris accumulated in and around the Trainees' Hostel of the Rathindra KVK through the manual work.
18.09.2023	The Instructional Farm of the Rathindra KVK like Orchard, Crop Cafeteria, Nursery, Mushroom Unit, Vermi Compost Unit etc. and Demonstration Units like the Fish Breeding Unit, the Poultry and Duckery Units etc. were thoroughly cleaned, the weeds were manually up-rooted, and the farm wastages and the crop residues were used as input in the Vermi-Composting Unit of the Rathindra KVK. In this Operational procedure, the Threshing Floor of the Instructional Farm and the Medicinal Plants Garden of the Rathindra KVK was thoroughly cleaned and the Farm debris was utilized as input material for the Vermi-Composting Unit of the Rathindra KVK.
19.09.2023	All the staff of the Rathindra KVK have taken initiatives to clean the remaining debris, garbage, and dust inside, outside and roof of the Administrative Building of the Rathindra Krishi Vigyan Kendra.
20.09.2023	All the staff of the Rathindra KVK have made a wholehearted effort to clean the Office Building Complex of the KVK through cleaning the dusts, cobwebs, weeding out the weeds etc. through manual work.
21.09.2023	All the staff of the Rathindra KVK have taken a wholehearted effort to clean the outside the Office Building Complex of the KVK including the main Gate. The main path and adjoining areas through cleaning the dusts, cobwebs, weeding out the weeds etc. through manual work.
22.09.2023	All the staff of the Rathindra KVK has taken a wholehearted effort to clean the outside the Office Building Complex of the KVK including the ornamental Hedges and Garden and adjoining areas through cleaning the dusts, cobwebs, weeding out the weeds etc. through manual work.
23.09.2023	DAESI Students of Rathindra KVK cleaned the Mushroom Unit under the supervision of Staffs of KVK.
24.09.2023	The Rathindra KVK Staffs made aware about the general importance of the cleanliness in the day to day life as well as the importance of the call of the Father of the Nation, Mahatma Gandhi as well as the point of view expressed by the present Union Government headed by the Honorable Prime Minister, Sri Narendra Bhai Modi were discussed in details with special emphasis on nurturing the habit of cleanliness from very beginning of a life at a tender age by the scientists of the Rathindra KVK.
25.09.2023	Rathindra KVK has organized a meeting of the Office Staff regarding the "**Swachhata Hi Sewa (SHS)***"* through utilizing the Office ICT tools of the Rathindra KVK about the importance of the cleanliness in the day-to-day life as well as in all the Agricultural and related activities.
26.09.2023	The Rathindra KVK has organized an Awareness Camp for Input Dealers of Agricultural Chemicals in the Rathindra KVK Campus and they were made aware about the general importance of the cleanliness in the day to day life as well as the importance of the call of the Father of the Nation, Mahatma Gandhi as well as the point of view expressed by the present Union Government headed by the Honorable Prime Minister, Sri Narendra Bhai Modi were discussed in details with special emphasis on nurturing the habit of cleanliness from very beginning of a life at a tender age by the scientists of the Rathindra KVK.
27.09.2023	The Instructional Farm of the Rathindra KVK like Orchard, Crop Cafeteria, Nursery etc. and Demonstration Units like the Fish Breeding Unit, the Poultry and Duckery Units etc. were thoroughly cleaned, the weeds were manually up-rooted, and the farm wastages and the crop residues were used as input in the Vermi-Composting Unit of the Rathindra KVK.
28.09.2023	All the Staffs of the Rathindra KVK has organized a thorough cleaning operation through manual weeding out of weeds, cleaning of debris with the help of brooms, destruction of weeds, placing the garbage in the specific garbage cans etc. in the areas adjacent with the Administrative Office Building of the Rathindra KVK as well as the Trainees Hostel of the Rathindra KVK.
29.09.2023	All the Staff of the Rathindra KVK organized a Walk inside the Sriniketan Campus of Visva-Bharati to make the people aware of the importance of "*Swachhata Hi Sewa (SHS)".*
30.09.2023	All the Staff of the Rathindra KVK made a pledge on cleanliness to make the KVK premises and outside of the KVK premises neat and clean with their all efforts.
01.10.2023	The Threshing Floor of the Instructional Farm and the Medicinal Plants Garden of the Rathindra KVK was thoroughly cleaned and the Farm debris was utilized as input material for the Vermi-Composting Unit of the Rathindra KVK.
02.10.2023	DAESI Students of Rathindra KVK cleaned the Vermi Compost Unit of KVK and utilized the Farm Wastes of the Institute through incorporating the wastes into the Culture media of the Vermi Composting pits.

b. Details of Swachhta activities with expenditure

Activities	Number	Expenditure (in Rs.)
1. Digitization of office records/ e-office	07	
2. Basic maintenance	09	
3. Sanitation and SBM	08	
4. Cleaning and beautification of surrounding areas	02	
5. Vermicomposting / Composting of biodegradable waste management & other activities on generate of wealth for waste	06	
6. Used water for agriculture/ horticulture application	01	
7. Swachhta Awareness at local level	12	34,000.00

8. Swachhta Workshops	-	
9. Swachhta Pledge	01	
10. Display and Banner	-	
11. Foster healthy competition	-	
12. Involvement of print and electronic media	-	
13. Involving the farmers, farm women and village youth in the adopted villages (no of adopted village)	04	
14. No of Staff members involved in the activities	20	
15. No of VIP/VVIPs involved in the activities	-	
16. Any other specific activity (in details) Review of Physical files for weeding	05	
Total	**75**	**34,000.00**

9.6. Observation of National Science Day

Date of Observation	Activities undertaken

9.7. Programme with Seema Suraksha Bal/ BSF

Title of Programme	Date	No. of participants

9.8. Agriculture Knowledge in rural school

Name and address of school	Date of visit to school	Areas covered	Teaching aids used

Give good quality 1-2 photograph(s)

9.9. Details of '*Pre-Rabi Campaign*' Programme

Date of programme	No. of Union Ministers attended the programme	No. of Hon'ble MPs (Lok Sabha / Rajyasabha) participated	No. of State Govt. Ministers	Participants (No.)							Coverage by Door Darshan (Yes/No)	Coverage by other channels (Number)
				MLAs Attended the programme	Chairman Zila Panchayat	Distt. Collector / DM	Bank Officials	Farmers	Govt. Officials, PRI members etc.	Total		

9.10. Details of Swachhta Hi Suraksha programme organized.

Sl. No.	Activity	No. of villages Involved	No. of Participants	No. of VIPs	Name (s) of VIP(s)

9.11. Details of Mahila Kisan Divas programme organized.

Sl. No.	Activity	No. of villages Involved	No. of Participants	No. of VIPs	Name (s) of VIP(s)

9.12. No. of Progressive/ Innovative/ Lead farmer identified (category wise)

Sl. No.	Name of Farmer	Address of the farmer with contact no.	Innovation/ Leading in enterprise
01.	Sri Srikanta Pandit	Vill. - Kamalakanpur; P.O.- Khanjanpur; Pin. – 731236, Dist. – Birbhum, Mob- 9647886328	Leading in CFLD on Chickpea cultivation in his locality in Rice - Fallow situation.
02.	Sri Gadai Ghosh	Vill. –Rajatpur; P.O. - Rajatpur; Pin. – 731204, Dist. – Birbhum, Mob- 8670076681	Leading in CFLD on Mustard cultivation in his village and surrounding village.
03.	Sri Uday Ghosh	Vill. –Rajatpur; P.O. - Rajatpur; Pin. - 731204, Dist. – Birbhum, Mob- 8670076681	Leading in CFLD implementation on new variety of Wheat in large area.
04.	Sri Partha Mal	Vill. –Daranda; P.O. –Dwaronda; Pin. - 731236, Dist. – Birbhum, Mob- 8926536411	Leading in Vermi-compost production sale and use in production of organic vegetables.
05.	Sri Bipadtaran Ghosh	Vill. –Kartikdanga; P.O. – Raipur; Pin. - 731204, Dist. – Birbhum, Mob- 8900484426	Leading in cultivation of large Ekangi (Medicinal Plant) as crop diversification and making market channel to sale it.
06.	Smt. Malati Biswas	Vill. –Kalinagar Colony; P.O. –Chowhatta, Pin. – 731201, Dist. – Birbhum, Mob- 9002176948	Leading to popularise Linseed cultivation in her area.
07.	Smt. Lalita Tudu	Vill. – Faridpur; P.O. –Bilatisultanpur; Pin. - 731236, Dist. – Birbhum, Mob- 9609646189	Leading in CFLD programme in Sesame as crop diversification in her locality.
08.	Sri Lakshi Narayan Sen	Vill. –Senkapur; P.O. – Raipur; Pin. - 731204, Dist. – Birbhum, Mob- 9933937720	Leading in CFLD programme on Field Pea in Rice - Fallow situation in his area.
09.	Smt. Lakshmi Mardi	Vill. – Faridpur; P.O. –Bilatisultanpur; Pin. - 731236, Dist. – Birbhum, Mob- 8942902797	Leading in CFLD on Summer Green Gram instead of Boro Rice in her area.
10.	Sri Subhasish Ghosh	Vill. –Digha; P.O. –Digha; Pin. – 731236, Dist. – Birbhum, Mob- 8640866516	Leading in using Drum Seeder for Paddy cultivation to promote conservation agriculture in his locality.
11.	Sri Nisith Ghosh	Vill. –Damdama; P.O. – Laudaha; Pin. - 731204, Dist. – Birbhum, Mob- 9800604849	Leading to implement CFLD on Black Gram and Sesame in Kharif season as crop diversification in his locality.

12.	Sri KhudiramDebangshi	Vill. –Debanandapur; P.O. –Laudaha; Pin. - 731204 Mob- 9002688159	Leading in Lentil cultivation in Rice - Fallow under CFLD programme in his village and surrounding villages.
13.	Sri Debashish Mandal	Vill. –Surul; P.O. – Sriniketan; Pin. - 731236, Dist. – Birbhum, Mob- 7001358872	Leading in Dairy Farm
14.	Sri Bidhan Sinha	Village: - Mirzapur, P. O. – Raipur, Pin. – 731204, Dist. – Birbhum, West Bengal, Mob- 9734134282	Innovative Dairy Farmer
15.	Smt. Prava Biswas	Vill. – Melegar; P.O. –Illumbazar; Pin. – 731214, Dist. – Birbhum, Mob- 8016284129	Progressive Rural Back Yard Poultry Farmer.
16.	Smt. Sukodi Mardi	Vill. – Adibasi Para, Bishnubati, P. O. – Sattore; Pin. – 731236, Dist. – Birbhum, Mob. 9647677362	Leading in Self Help Group formation, Handi Crafts and Rural Crafts production
17.	Sri Tapan Ghosh	Village: Bishnubati, CD Block: Bolpur-Sriniketan, P. O. – Sattore, Pin. – 731236, Police Station: Sattore, District: Birbhum, Mob: 9614057093	Innovative Farmer of SRI Marker and Rural Back Yard Poultry based on Improved Rural Breeds and Breed Up-gradation
18.	Sri Mahadev Sarkar	Vill. – ChotoShimulia, P. O. – Panchshoya, Dist. – Birbhum, Mob. - 8670077649	Leading in cultivation of High Value Low Volume Vegetables like Capsicaum, Broccoli, French Beans, Chinese Cabbage etc.
19.	Sri Arabinda Pal	Vill. – Sundipur, P. O. – Bishnukhanda, Pin. – 731236, Dist. – Birbhum Mob: 7001024884	Innovative Farmer of Fish based Integrated Farming System (IFS)
20.	Sri Tuhin Subhra Dey	Vill. – Domdoma, P. O. – Albandha, Pin. – 731204, Dist. – Birbhum, Mob: 9735174764	Innovative Farmer of Fish based Integrated Farming System (IFS)
21.	Sri Abu Taher	Vill. – Mala, P. O. –Bergram, Dist. – Birbhum Mob. 7872454731	Innovative Farmer of Fish based Integrated Farming System (IFS)
22.	Sr Arbinda Chakraborty	Vill. –Hatikra; P.O. –Panrui, Dist. – Birbhum Mob. - 9732332656	Innovative Farmer of modern Fish Hatchery.
23.	Sri Sunil Das	Vill. –Srichandrapur; P.O.- Sattore; Pin. – 731236, Dist. – Birbhum, Mob. - 9679885667	Innovative farmer of Glass Jar Hatchery, cultivation of Amur Common Carp
24.	Sri Bapi Dhara	Vill. –Srichandrapur; P.O. –Sattore; Pin. – 731236, Dist. – Birbhum, Mob. - 9851470447	Progressive farmer of culture of Amur, Jayanti Rohu, Monosex Tilapia
25.	Sri Buddhadeb Ghosh	Vill. –Amgoria; P.O. –Bishnukhanda, Dist. – Birbhum, Mob. 9475097332	Progressive fish fingerling producer.
26.	Sri Santosh Ghosh	Vill. –Amgoria; P.O. –Bishnukhanda, Dist. – Birbhum, Mob. - 7076593717	Progressive fish fingerling producer.

9.13. Revenue generation (as on 31.12.2023)

Sl No.	Name of Head	Income (Rs.)	Sponsoring agency
1. 2. 3.	Revolving Fund from sale of 1. Farm Produce like Seeds, Planting Materials, Fruits from Mango Orchard, Honey, Demonstration Farm for Seed Production, and Demonstration Progeny Orchards of the Rathindra KVK 2. Poultry Birds of the Demonstration Poultry of the Rathindra KVK) 3. Fishes of the Pond of the Rathindra KVK)	1,84,393.00	Own arrangement – KVK Demonstration Farms, Orchards, Poultry, Pond etc.
4.	Seminar Hall Rent	83,000.00	
5.	Rent from Trainees' Hostel	42,600.00	
6.	Monitoring of DAESI Students	80,000.00	
7.	Institutional Charges for organizing RAWE Programme	6,03,000.00	
	Total	**9,92,993.00**	

9.14. Resource Generation (January – December, 2023):

Sl No.	Name of the programme	Purpose of the programme	Sources of fund	Amount (Rs. Lakhs)	Infrastructure created
01.	Cluster Front Line Demonstrations (Cluster FLDs) on Kharif Oilseeds	To disseminate Improved Varieties, Agro-Technologies and supporting Package of Practices for Kharif Oilseeds Production	ICAR, New Delhi	2.50	
02.	Cluster Front Line Demonstrations (Cluster FLDs) on Kharif Pulses	To disseminate Improved Varieties, Agro-Technologies and supporting Package of Practices for Kharif Pulses Production	ICAR, New Delhi	3.60	

03.	Cluster Front Line Demonstrations (Cluster FLDs) on Rabi Oilseeds	To disseminate Improved Varieties, Agro-Technologies and supporting Package of Practices for Rabi Oilseeds Production	ICAR, New Delhi	0.60	
04.	SWACCHA Action Plan in 2023-24	To generate awareness and skill of the practicing farmers, far women, rural youth and grass-root level extension functionaries in maintenance of hygienic condition and cleanliness a part and parcel of each and every aspect of daily economic and social life	ICAR, New Delhi	0.34	
05.	District Agromet Unit (DAMU)	To provide real time information on District Weather and Meteorological Data and their interpretations to the practicing farmers, farm women, rural youths and extension functionaries for taking suitable actions	IMD, Ministry of Earth Sciences, Govt. of India, New Delhi	12.23	
06.	STRY Programme	Skill Development Training Programme for Rural Youths on "Bee keeping" and "Goat Rearing"	SAMETI, West Bengal	0.84	
07.	GIA CAPITAL SCSP Grant	Establishment of Custom Hiring Center	ICAR - IIAB, Ranchi	18.30	
08.	SCSP General	Distribution of Small Farm implements, Fishing Nets, Fish feed, Vaccine and Mineral mixture for Livestock, Drum seeder, Lime for Fishponds, Fruit plant sapling, Organization of Capacity Building Training programmes	ICAR - IIAB, Ranchi	8.51	
09.	Hydronano in BORO Rice	Trial on Enhancing productivity of BORO Rice using Hydronano M under red lateritic soil region in West Bengal	Invati Creation Pvt. Ltd	1.508	
10.	Short Term Research	Prevention and Control of Piglet Anaemia	ATMA, Birbhum, Govt. of West Bengal	2.50	
		Total		**32.375**	

9.15. Performance of Automatic Weather Station in KVK

Date of establishment	Source of funding i.e., IMD/ICAR/Others (pl. specify)	Present status of functioning
02.07.2021	IMD	Fully functioning

9.16. Contingent crop planning

Name of the state	Name of district/KVK	Thematic area	Number of programmes organized	Number of Farmers contacted	A brief about contingent plan executed by the KVK

10. Report on Cereal Systems Initiative for South Asia (CSISA)

a) Year: 2023

b) Introduction / General Information:

Indian Council of Agricultural research (ICAR)-Agricultural Technology Application Research Institute (ATARI), Kolkata and Directorate of Extension Education, Odisha University of Agriculture & Technology (DEE-OUAT), Bhubaneswar jointly convened a "Convergence Platform Working" facilitated by Cereal Systems Initiative for South Asia (CSISA) on 16thJune 2023 at the DEE, OUAT, Bhubaneswar. In the meeting, it was decided that Landscape Diagnostic Survey (LDS) in pulses will be taken up in 9 KVKs (Bargarh, Dhenkanal, Cuttack, Mayurbhanj-2 and Puri of Odisha, Nadia, Mursidabad, Birbhum and North 24 Parganas of West Bengal). Specialized training programs will be conducted for these 9 selected KVKs of this Zone on LDS for Pulses in Rice-Pulse cropping system to be organized in a phased manner.

	Title	Objective	Treatment details	Date of sowing	Replication	Result with photographs
Experiment 1						
Experiment 2						
..						
Others (If any)						

11. Details of DAPST/ TSP

a. Achievements of physical output under TSP during 2023

Progress of DAPST for the year 2023 (Jan. to Dec. 2023)

Name of KVK:						
Sl. No.	***Item/Activity***	***Units***	***Targets/Achievements***		***No. of Beneficiaries***	
			Annual Targets	***Achievements***	***Annual Targets***	***Achievements***

1	**Trainings (Capacity building/ Skill Development etc.)**		No.				
	1.1	1-3 days	No.				
	1.2	4-10 days	No.				
	1.3	2-4 weeks	No.				
	1.4	More than 4 weeks	No.				
2	**On Farm Trials (OFTs)**		No.				
3	**Front Line Demonstrations (FLDs) and other demonstrations**		No.				
4	**Awareness camps, exposure visits etc.**		No.				
5	**Input Distribution**						
	5.1	Seeds (Field Crops)	Tonnes				
	5.2	Seeds (High Value Crops, spices etc.)	kg				
	5.3	Seeds (Root & Tuber Crops)	tonnes				
	5.4	Nursery plants	No.				
	5.5	Cutting, slips, suckers, etc	No.				
	5.6	Mushroom Spawns/ Bio-Fertilizers (in Packets)	Packets				
	5.7	Honeybee Colonies	No.				
	5.8	Animals-large (Cattle/ Buffalo/ camel/horse/donkey/Mithun/Yak etc.)	No.				
	5.9	Animals-small (pig, sheep, goat etc.)	No.				
	5.1	Poultry chicks / duckling etc	No.				
	5.11	Fish Spawns/ fingerlings	No.				
	5.12	Small equipment's (upto Rs 2000)	No.				
	5.13	Medium Equipment's/ machinery (upto Rs 25000)	No.				
	5.14	Large Equipment's / machinery (> Rs. 25000)	No.				
	5.15	Infrastructure / Civil Works/ Ponds etc	No.				
	5.16	Setting up plant nursery/ seed farm/ hatchery	No.				
	5.17	Land development/ Reclamation / Conservation	hectares				
	5.18	Fertilizers (NPK)/ Secondary fertilizers	tonnes				
	5.19	Micro nutrients	tonnes				
	5.2	FYM/ Vermicompost	tonnes				
	5.21	Soil amendments (Gypsum, lime etc.)	tonnes				
	5.22	Plant protection chemicals	kg				
	5.23	Plant growth Promoter	kg				
	5.24	Animal Feed	tonnes				
	5.25	Animal Fodder	tonnes				
	5.26	Animal medicines	doses				
	5.27	Any other (Liquid PSB etc.)	Litre				
6	**Services/Facilitation**						
	6.1	Animal Health Camps	No.				
	6.2	Artificial Insemination / Vaccination	No.				
	6.3	Veterinary Services (Hospitalization, on-site treatment, PD, surgery etc)	No.				
	6.4	Testing samples of Soil, plant, water, feed, fodder and livestock	No.				
	6.5	Promotion of agri-entrepreneurship	No.				
	6.6	Promotion of IFS, IOFS, Natural Farming, Nutrigarden, kitchen garden, orchards etc	No.				
	6.7	Creation of market links of farm produces	No.				
	6.8	Use of Institute Facilities (Processing etc.) (in Hours)	Hours				
	6.9	Subsidies/ Assistance (50% of Project cost, Max. Rs 10,000/beneficiary)	No.				
7	**Distribution of Literature**		No.				
8	**Employment generation for livelihood**		(Man-months)				
9	**Fellowship, Stipends or Scholarship**		No.				

10	**Area oriented R&D Activity (project addressing the problems of agri. Sector faced by the SC/STs and benefit directly, which is measurable and identifiable**	No. of projects					
11	**Monitoring & Evaluation of DAPSC/ST (upto 3%)**						
12	**Any other (specify)**						

b. Fund received under TSP in 2023-24 (Rs. In lakh):

12. Details of DAPSC/ SCSP

a. Achievements of physical output under SCSP during 2023

Progress of DAPSC for the year 2023 (Jan. to Dec. 2023)

Name of KVK:							
Sl. No.	**Item/Activity**		**Units**	**Targets/Achievements**		**No. of Beneficiaries**	
				Annual Targets	**Achievements**	**Annual Targets**	**Achievements**
1	**Trainings (Capacity building/ Skill Development etc.)**		No.				
	1.1	1-3 days	No.		56		491
	1.2	4-10 days	No.		09		215
	1.3	2-4 weeks	No.		01		12
	1.4	More than 4 weeks	No.				
2	**On Farm Trials (OFTs)**		No.		03		21
3	**Front Line Demonstrations (FLDs) and other demonstrations**		No.		24		1092
4	**Awareness camps, exposure visits etc.**		No.				
5	**Input Distribution**						
	5.1	Seeds (Field Crops)	Tonnes		4.05		502
	5.2	Seeds (High Value Crops, spices etc.)	kg				
	5.3	Seeds (Root & Tuber Crops)	tonnes		0.705		113
	5.4	Nursery plants	No.		56280		814
	5.5	Cutting, slips, suckers, etc.	No.				
	5.6	Mushroom Spawns/ Bio-Fertilizers (in Packets)	Packets				
	5.7	Honeybee Colonies	No.				
	5.8	Animals-large (Cattle/ Buffalo/ camel/horse/donkey/Mithun/Yak etc.)	No.				
	5.9	Animals-small (pig, sheep, goat etc.)	No.				
	5.1	Poultry chicks / duckling etc.	No.		900		90
	5.11	Fish Spawns/ fingerlings	No.		700000		91
	5.12	Small equipment's (upto Rs 2000)	No.		37		37
	5.13	Medium Equipment's/ machinery (upto Rs 25000)	No.				
	5.14	Large Equipment's / machinery (> Rs. 25000)	No.				
	5.15	Infrastructure / Civil Works/ Ponds etc.	No.				
	5.16	Setting up plant nursery/ seed farm/ hatchery	No.				
	5.17	Land development/ Reclamation / Conservation	hectares				
	5.18	Fertilizers (NPK)/ Secondary fertilizers	tonnes				
	5.19	Micronutrients	tonnes				
	5.2	FYM/ Vermicompost	tonnes		14.500		624
	5.21	Soil amendments (Gypsum, lime etc.)	tonnes				
	5.22	Plant protection chemicals	kg				
	5.23	Plant growth Promoter	kg				
	5.24	Animal Feed	tonnes				
	5.25	Animal Fodder	tonnes				
	5.26	Animal medicines	doses				
	5.27	Any other (Liquid PSB etc.)	Litre				
	5.28	Any other (Fodder Seeds)	Qtl.		3.13		45
	5.29	Any other (*Trichoderrma viridi*)	Kgs.		20		120
6	**Services/Facilitation**						
	6.1	Animal Health Camps	No.		07		350
	6.2	Artificial Insemination / Vaccination	No.				
	6.3	Veterinary Services (Hospitalization, on-site treatment, PD, surgery etc.)	No.				
	6.4	Testing samples of Soil, plant, water, feed, fodder and livestock	No.				
	6.5	Promotion of agri-entrepreneurship	No.				
	6.6	Promotion of IFS, IOFS, Natural Farming, Nutri-garden, kitchen garden, orchards etc.	No.				
	6.7	Creation of market links of farm produces	No.				

	6.8	Use of Institute Facilities (Processing etc.) (in Hours)	Hours		70		09
	6.9	Subsidies/ Assistance (50% of Project cost, Max. Rs 10,000/beneficiary)	No.				
7	**Distribution of Literature**		No.		08		4000
8	**Employment generation for livelihood**		(Man-months)		293.17		3518
9	**Fellowship, Stipends or Scholarship**		No.				
10	**Area oriented R&D Activity (project addressing the problems of agri. Sector faced by the SC/STs and benefit directly, which is measurable and identifiable**		No. of projects				
11	**Monitoring & Evaluation of DAPSC/ST (upto 3%)**						
12	**Any other (specify) Celebration of One Day special Programmes**		No.		10		2440

b. Fund received under SCSP in 2023-24 (Rs. In lakh): 17.00

13. Progress report of NICRA KVK (Technology Demonstration component) during the period (Applicable for KVKs identified under NICRA)

Natural Resource Management

Name of intervention undertaken	Numbers undertaken	No of units	Area (ha)	No of farmers covered / benefitted									Remarks
				SC		ST		Other		Total			
				M	F	M	F	M	F	M	F	T	

Crop Management

Name of intervention undertaken	Area (ha)	No of farmers covered / benefitted									Remarks
		SC		ST		Other		Total			
		M	F	M	F	M	F	M	F	T	

Livestock and fisheries

Name of intervention undertaken	Number of animals covered	No of units	Area (ha)	No of farmers covered / benefitted									Remarks
				SC		ST		Other		Total			
				M	F	M	F	M	F	M	F	T	

Institutional interventions

Name of intervention undertaken	No of units	Area (ha)	No of farmers covered / benefitted									Remarks
			SC		ST		Other		Total			
			M	F	M	F	M	F	M	F	T	

Capacity building

Thematic area	No of activities	No of beneficiaries								
		SC		ST		Other		Total		
		M	F	M	F	M	F	M	F	T

Extension activities

Thematic area	No of activities	No of beneficiaries								
		SC		ST		Other		Total		
		M	F	M	F	M	F	M	F	T

Detailed report should be provided in the circulated Performa.

14. Awards/Recognition received by the KVK

Sl. No.	Name of the Award	Year	Conferring Authority	Amount	Purpose

Award received by Farmers from the KVK district.

Sl. No.	Name of the Award	Name of the Farmer	Year	Conferring Authority	Amount	Purpose
01.	Certificate of Excellence Award at the Halakarshana Utsav - 2023	Sri. Amit Ghosh	2023	Visva-Bharati University	-	To encourage the farmer for his pioneering role as Innovative Farmers for installation of Innovative Incubators with Technological backstopping
02.	Certificate of Excellence Award at the Halakarshana Utsav - 2023	Kumari Nupur Mondal	2023	Visva-Bharati University	-	To encourage the farmer for her pioneering unique role as Agri-Entrepreneur in Mushroom production and popularization of the technology.
03.	Certificate of Excellence Award at the Halakarshana Utsav - 2023	Smt. Sakhi Mal	2023	Visva-Bharati University	-	To encourage the farmer for her unique role in establishing and managing Farmers' Producers' Company (FPC) and Self-Help Groups (SHGs) comprised of only practicing Farm Women from Scheduled Caste and Scheduled Tribe communities.
04.	Certificate of Excellence Award at the Halakarshana Utsav - 2023	Smt. Sampa Hazra (Roy)	2023	Visva-Bharati University	-	To encourage the farmer for her unique role in organising Cluster Front Line Demonstration (CFLD) Programme on Oilseed, Crop-Sesame, through Group Approach.

15. Any significant achievement of the KVK with facts and figures as well as quality photograph

The Rathindra Krishi Vigyan Kendra has assessed, disseminated, popularized and handed over the under noted technologies, products, processes and services among the farming community of Birbhum District.

A. Cultivation of Kharif Oilseed (as crop diversification) Crop Sesame, Var. – CUMS-17 (Suprava), SWB-32-10-1 (Sabitri): -
Variety: - Seeds of Improved VarietyCUMS-17 (Suprava) and SWB-32-10-1 (Sabitri) @ 6 kg. / ha
Herbicide Application - Application of herbicides Pendimethalin @ 3 lit. / ha at 1 – 3 DAS.
Sulphur application
Micro-Nutrient Spray - Foliar Spray of Micro-Nutrients: - Zn EDTA @ 1 gm. / lit. of water at 25 and 45 DAS.
Average Net Return to the farmer due to the practice is Rs. 33,265.00 / ha. / Annum and 416 numbers of farmers adopted the practice in the district.

B. Cultivation of Kharif Pulses (as crop diversification) Crop Black gram, Var. – PU-01 and PU 31 -
Variety: - Seeds of Improved VarietyPU-01 and PU-31 @ 30 kg. / ha
Herbicide Application - Application of herbicides Pendimethalin @ 3 lit. / ha at 1 – 3 DAS.
Phosphate application
Micro-Nutrient Spray - Foliar Spray of Micro-Nutrients: - Boron-20 @ 2 gm. / lit. of water at 25 and 45 DAS.
Average Net Return to the farmer due to the practice is Rs. 45,800.00 / ha. / Annum with B:C ratio of 3.41 and 652 numbers of farmers adopted the practice in the district.

C. Low-Cost Commercial Vermin-Composting Unit: -

Earthworms (*Eisenia foetidae*) are being used.
Low-cost pits built-up with mainly bare bricks covered Polythene Sheets are to be used.
Organic farm and domestic wastes along with cow dung are to be used as compost culture media.
Regular optimum watering of compost media is to be ensured.
Sieving and packaging of usable Vermin-Compost is done as and when necessary.
Average Net Return to the practicing farmers due to the practice is Rs. 85,714.00 / ha. / Annum and 151 numbers of farmers adopted the practice in the district.

D. Manifold Increase in Farm Income through cultivation of *Ekangi* - a Medicinal Plant – a truly potential Crop Diversification Effort

Ekangi is also known as Aromatic Ginger, Kencur etc. Cultivation of Ekangi (*Kaempferia galanga L.*), a medicinal plant was imitated by the Rathindra KVK (RKVK) in different villages in Kharif season, in mono cropped rice area as a part of the crop diversification programme. *Ekangi* has several medicinal properties. Its rhizome powder is used as appetite enhancer and also treating for stomach-ache. The rhizome extract is largely used as limiting agent for rheumatism, repellent of mosquito and nematode against *Meloidogyne* in wheat.
Before cultivation of *Ekangi,* farmers cultivated the Kharif Rice Variety MTU-7029 and earned Net Return of Rs. 33,461.00 per ha in their rain-fed mono cropped situation with B:C ratio of 1.50.
In this year, RKVK conducted FLD on 0.26 ha area in 56 farmers field and earned net return of Rs. 678200/ha with B:C ratio of 6.22.
Social Impact – As the farm income is getting increased by manifold, the community perception to *Ekangi* cultivation is getting more encouraging. Other farmers are being more and more attracted to cultivate the *Ekangi* crop.

Environmental Impact –*Ekangi* is a totally rain-fed crop, so there is no loss of water. Total rainwater is used for production. Crops cover the fields within 3 Months, so no soil erosion through leaching is occurred due to heavy rain or heavy wind. Evaporation is lowered down from the area, so Ground Water Table is maintained properly. It is an herbal or medicinal crop. The products from it are always herbal or without Chemical. Use of the products from it helps to reduce the chemical load to human body as well as nature.

Horizontal Spread - In the year 2015-16, only three farmers of Kartikdanga Village, C. D. Block – Bolpur – Sriniketan of Birbhum District started *Ekangi* cultivation as Partner Farmers of the FLD Programmes initiated by the Rathindra KVK in 0.26 ha area. Presently it has been spread to more than 10 ha area throughout the district.

E. The taste of success with homemade incubator and poultry rearing.

Name and Contacts of farmer: Amit Ghosh, Mobile No- 9547322311, email-id: rathindrakvk@gmail.com
Address: C/O-Dinabandhu Ghosh, Vill- Galundi (Paschim Para) P.O.-Galundi, Bolpur, Dist.- Birbhum, 731240, West Bengal
Amit Ghosh was an electrician. He is having only 1 acre of land and cultivating mainly paddy, mustard, potato to maintain his own means of livelihood. The income from his activities was not satisfactory. He visited Rathindra Krishi Vigyan Kendra frequently to know other possible avenues of earning from Animal Husbandry and related sectors. RKVK identified his technical skill and motivated him to develop homemade Incubator and begin poultry rearing in both backyard and deep litter system. RKVK also helped him to create linkages with different Women Self Help Groups and Agricultural Technology Management Agency (ATMA) for installation of his homemade Incubator. Nowadays he is earning Rs. 22000/ from his poultry keeping and related venture.

Contribution of KVK towards that venture: Sri Ghosh was given a 3-day intensive skill development training programmes on scientific poultry farming and management practices and low-cost feed formulation of poultry by Rathindra KVK, Birbhum. He also attended various awareness programmes and exposure visits to public as well as private sector poultry farms for gaining firsthand experiences. Free of cost Vaccine along with vety. medicine e.g., antibiotic, anticoccidial drugs, vitamins and mineral supplements supplied by Krishi Vigyan Kendra was also part of the initial inputs. He was also supported by technical know-how to develop a homemade Incubator. The marketing of his homemade incubator was also extended by RKVK by linking with, different SHGs, Agricultural Technology Management Agency (ATMA) and other poultry farmers.

Coverage and Impact of training / hand holding on the successful venture:
The training helped him to learn scientific management of various aspects of poultry rearing. Technical support to develop homemade incubator by Krishi Vigyan Kendra made the venture a profitable one. Use of homemade incubator boosts up the fast production of chicks in rural area. Using this low-cost incubator continuous production and supply of rural backyard poultry chicks e.g., Vanraja, RIR, Aseel. Kadaknath etc. is possible.

Horizontal spread of the successful case: Amit participates in various training programme as a resource person. After installation of his low-cost homemade incubator, he trained and assisted the SHG members in successful hatching of eggs. His success attracted rural youths and farm women to start poultry rearing and hatching their own chicks.

Cultivation of Kharif Oilseed Crop Sesame, Var. - Suprava	**After harvesting of Kharif blackgram at the village**
	
Sri Partha Mal (a Rural Youth nurtured by the Rathindra KVK) watering the Vermin-Compost Materials in his Low-Cost Commercial Vermin-Composting Unit at Village: - Daronda,	**Sri Bipadtaran Ghosh with Rathindra KVK Scientist discussing harvested Rhizomes of *Ekangi***
	
Sri. Amit Ghosh with homemade incubator and poultry rearing	

16. Number of commodity-based organizations/ farmers' cooperative society/ FPO formed/ associated with during last one year (Details of the group/society may be indicated)

Sl. No.	Name of the FPC	Company Deed No.& date	Date of Company Registration Address	Proposed Activity	Commodity Identified	No. of Proposed Members
01.	MADHUMALATI MAHILA FARMERS PRODUCER COMPANY LIMITED	**CIN NO. – U01100WB2023PTC259628 Dated – 06.01.2023**	**Date of Company Registration: - 06.01.2023** Address – Village – Rajatpur Purbapara, P. O. - Bolpur, P. S. – Bolpur, Block – Bolpur-Sriniketan, Dist. – Birbhum, West Bengal – 731204	IMPROVED CULTIVATION PRACTICES AND BULK SELLING OF FARM PRODUCE WITH SPECIAL REFERENCE TO RICE, POTATO, MUSTARD ESTABLISHMENT OF FERTILIZER AND AGRICULTURAL INPUTS SHOP IS UNDER PROGRESS.	Rice, Mustard, Potato	1500

17. Integrated Farming System (IFS)
Details of KVK Demo. Unit

Sl. No.	Module details (Component-wise)	Area under IFS (ha)	Production (Commodity-wise)	Cost of production in Rs. (Component-wise)	Value realized in Rs. (Commodity-wise)	No. of farmer adopted practicing IFS	% Change in adoption during the year
		No such unit at RKVK					

18. Technologies for Doubling Farmers' Income

Sl. No.	Name of the Technology	Brief Details of Technology (3- 5 bullet points)	Net Return to the farmer (Rs.) per ha per year due to adoption of the technology	No. of farmers adopted the technology in the district	One high resolution 'Photo' in 'jpg' format for each technology
01.	Crop diversification through cultivation of medicinal plant Ekangi (*K. galanga)*	• In the kharif season, rainfed monocropped area instead of Rice (B:C 1.50) • Time of Planting – May-June with nor-wester • Seed Rate: 7.5 q/ha (Rhizome of 4 cm length of 2 buds) • Intercultural Operation: Weeding at 2nd and 4th week, then straw mulching. • Yield:130- 160 q/ha. 6-8 months after planting.	6,78,200.00 (B:C 6.22)	126 in 10 villages	
02.	Varietal replacement of Elephant Foot Yam using the Variety Bidhan Kusum	• Crop Diversification with Varietal replacement in kharif season replacing Rice. • Medium to up land monocropped area • Improved variety Bidhan Kusum replacing local variety Senkapur OOl	5,56,000 (B:C ratio 5.45)	220	
03	Varietal replacement of local variety of Drumstick using Baromasia Sajne Kusum	• Crop Diversification with Varietal replacement in kharif season replacing Rice. • Improved variety PKM-1 • Planting of 1-2 months old seedlings	3,22,200 (B:C ratio 5.96)	190	

04	Introduction of new Poultry Breed	• New improved Poultry breed Kadaknath • Body weight is 1.7 kg at 23rd wk. • No. of egg produced per year is 140-150	2,23,000 (Per 100 bird unit)	125	

19. Report on Digital Farming Initiatives in Agriculture/ Digital Ag. Extension Service

Phase	Database prepared/ covered for		KVK level Committee		Various activity conducted for farmers
	Total no. of villages	Total no. of farmers	Date of formation	Name of members	
I (up-to 15.03.2018)					
II (up-to 24.04.218)					
Total					

20. Information on Visit of Ministers to KVKs, if any (Please provide good quality photographs)

Date of Visit	Name of Hon'ble Minister	Name of Ministry	Salient points in his/ her observation (2-3 bulleted points)

21 a) Information on ASCI Skill Development Training Programme, if undertaken during 2023

Name of the Job role	Name of the certified Trainer of KVK for the Job role	Date of start of training	Date of completion of training	No. of participants						Whether uploaded to SIP Portal (Y/N)	Fund utilized for the training (Rs.)
				SC		ST		Other			
				M	F	M	F	M	F		

b) Information on Skill Development Training Programme (Other than ASCI or less than 200 hrs., if any) if undertaken during 2023

Thematic area of training	Title of the training	Duration (In hrs.)	No. of participants									Fund utilized for the training (Rs.)
			SC		ST		Other		Total			
			M	F	M	F	M	F	M	F	T	

22. Information on NARI Project (if applicable)

Name of Nodal Officer	No. of OFT on specified aspects	Title(s) of OFT	No. of FLD on specified aspects	No. of capacity development programme on specified aspects	Total no. of farm women/ girls involved in the project	Details of Issues related to gender mainstreaming addressed through the project

23. Any other programme organized by KVK, not covered above.

Sl. No.	Name of the programme	Date of the programme	Venue	No. of participants
01.	PM Kisan Samman Nidhi	27.02.2023	RKVK, Birbhum	57
02.	International Conference on Millets	18.03.2023	RKVK, Birbhum	60
03.	World Milk Day	01.06.2023	RKVK, Birbhum	46
04.	World Environment Day	05.06.2023	RKVK, Birbhum	47
05.	Celebration of 95th ICAR Foundation Day	16.07.2023 to 18.07.2023	RKVK, Birbhum	
06.	PM Kisan Samman Nidhi	27.07.2023	RKVK, Birbhum	439
07.	Tree Plantation	09.08.2023	RKVK, Birbhum	
08.	National Nutrition Week	01.09.2023 to 07.09.2023	RKVK, Birbhum	54
09.	Observation of Swachhata Hi Sewa	15.09.2023 to 02.10.2023	RKVK, Birbhum	
10.	Observation of Swachhata Hi Sewa (SHS) Special Campaign 3.0	02.10.2023 to 31.10.2023	RKVK, Birbhum	
11.	Observation of Vigilance Awareness Week	30.10.2023 to 05.11.2023	RKVK, Birbhum	
11.	Pradhan Mantri Kisan Samman Nidhi	15.11.2023	RKVK, Birbhum	56
12.	World Soil Day	05.12.2022	RKVK, Birbhum	
13.	National Farmers Day (Kisan Samman Diwas)	23.12.2022	RKVK, Birbhum	

24. Good quality action photographs (with proper caption) of overall achievements of KVK during the year

Farmers-Scientists Meet
Date: 04.01.2023 No. of Participants: 53

FoCT Training Programme for Rural Youths
Date: No. of Participants: 20

Pradhan Mantri Kisan Samman Nidhi
Date: 27.02.2023 No. of Participants: 57

International Conference on Millet
Date: 18.03.2023 No. of Participants: 60

World Milk Day - 2023
Date: 01.06.2023 No. of Participants: 46

World Environment Day - 2023
Date: 05.06.2023 No. of Participants: 47

Training programme on Ornamental Fish Rearing
Date: 04.07.2023 No. of Participants: 30

Celebration of 95th ICAR Foundation Day
Date: 16.07.2023 to 18.07.2023 No. of Participants:

Pradhan Mantri Kisan Samman Nidhi
Date: 27.07.2023 No. of Participants: 439

Felicitation of Farmers at Halakarshan Utsav, Visva-Bharati
Date: 09.08.2023 No. of Participants:

Tree Plantation
Date: 09.08.2023 No. of Participants:

In-Service Training on Improved Cultivation Practices of Different Millets
Date: 11.08.2023 No. of Participants: 37

Training on Seed Production of Different Crops including Millets
Date: 23.08.2023 No. of Participants: 41

Celebration of National Nutrition Week – 2023
Date: 01.09.2023 to 07.09.2023 No. of Participants: 54

Visit of Founder Director and Vice Chancellor, ICAR-National Institute of Biotic Stress Management Baronda, Raipur, Chhattisgarh and Director, ICAR-Agricultural Technology Application Research Institute, Kolkata at Rathindra KVK,
Date: 01.09.2023

Distribution of Seeds under CFLD on Kharif Pulse by Hon'ble Director, ICAR-ATARI, Kolkata
Date: 02.09.2023 No. of Participants: 53

Observation of Swachhata Hi Sewa (SHS)
Date: 15.09.2023 to 02.10.2023 No. of Participants: 335

Observation of Swachhata Hi Sewa (SHS) Special Campaign 3.0
Date: 02.10.2023 to 31.10.2023

Observation of Vigilance Awareness Week -2023
Date: 30.10.2023 to 05.11.2023 No. Participants: 97

Pradhan Mantri Kisan Samman Nidhi
Date: 15.11.2023 No. of Participants: 56

Capacity Building Programme on ICAR-IIHR Technologies
Date: 23.11.2023 No. of Participants: 79

World Soil Day – 2023
Date: 05.12.2023 No. of Participants: 139

National Farmers Day (Kisan Samman Diwas) – 2023
Date: 23.12.2023 No. of Participants: 73

Annexure-I

Details of Training Programmes – 2023

Discipline	Clientele	Date (mm/dd/yyyy)	Title of the training programme	Duration in days	Venue (Off/On Campus)	No. of Participants									Grand Total		
						Other			SC			ST					
						M	F	T	M	F	T	M	F	T	M	F	T
Agricultural Extension	PF & PFW	1/13/2023 To 1/13/2023	Concept, Methodology of Functioning and Utilities of Milk Products based Women Farmers' Farmers' Interest Groups (FIGs)	1	OFF	4	38	42	3	35	38	0	0	0	7	73	80
	PFW	1/20/2023 To 1/20/2023	Concept, Methodology of Functioning and Utilities of Women Farmers' primary Dairy Co-operative Society and Linking it with Farmers' Interest Groups (FIGs) based on Milk and its By-products	1	OFF	0	0	0	0	54	54	0	4	4	0	58	58
	PFW	3/6/2023 To 3/6/2023	Concept, Methodology and Utilities of Milk Producers' Group Formation under Mayurakshi Cooperative Milk Union and Establishment of Linkage with Farm Women led Green Farms Producers' Company Ltd., Birbhum	1	OFF	0	0	0	0	55	55	0	0	0	0	55	55
	PFW	4/27/2023 To 4/27/2023	Concept, Methodology and Utilities of Milk Producers' Group formation under Mayurakshi Co-operative Milk Union	1	OFF	0	0	0	0	46	46	0	0	0	0	46	46
	PFW	5/26/2023 To 5/26/2023	Information and Knowledge Development Training Programme on "Concept, Methodologies and Utilities of Formation and Management of Women led Farmers' Producers' Company (FPC)"	1	OFF	0	0	0	0	0	0	0	70	70	0	70	70
	PF & PFW	6/23/2023 To 6/23/2023	Information and Knowledge Development Training Programme on Formation of Farmers' Interest Group (FIG) with Special Reference to Milk Production	1	OFF	0	0	0	0	0	0	9	41	50	9	41	50
	PFW	7/18/2023 To 7/18/2023	Evolution of Crop Insurance (CI)and Pradhan Mantri Fasal Bima Yojana (PMFBY)	1	OFF	0	18	18	0	37	37	0	0	0	0	55	55
	PF & PFW	8/18/2023 To 8/18/2023	Marketing Information and Market Linkage of Vegetable Farmers	1	OFF	25	0	25	0	19	19	0	0	0	25	19	44
	PFW	9/15/2023 To 9/15/2023	Training Programme on Marketing Information and Market Linkage of Pulse and Oilseed Farmers	1	OFF	0	0	0	0	42	42	0	9	9	0	51	51
	PF & PFW	10/6/2023 To 10/6/2023	Linking of Agriculture Infrastructure Fund (AIF) with Co-operatives, FPOs and FPCs	1	OFF	4	3	7	0	45	45	0	15	15	4	63	67
	PF & PFW	11/8/2023 To 11/8/2023	Training Programme on "Formation of Farmers' Producers Organizations (FPOs) based on successful and functional Self-Help Groups (SHGs)"	1	OFF	0	0	0	0	0	0	6	60	66	6	60	66
	PFW	12/23/2023 To 12/23/2023	Concept, Functioning and Use of Pradhan Mantri Fasal Bima Yojana (PMFBY)	1	OFF	0	23	23	0	13	13	0	6	6	0	42	42
	Total					**33**	**82**	**115**	**3**	**346**	**349**	**15**	**205**	**220**	**51**	**633**	**684**

Discipline	Clientele	Date (mm/dd/yyyy)	Title of the training programme	Duration in days	Venue (Off/On Campus)	No. of Participants									Grand Total		
						Other			SC			ST					
						M	F	T	M	F	T	M	F	T	M	F	T
Agronomy / Horticulture	PF & PFW	1/4/2023 To 1/4/2023	Farmers – Scientists Meet on "Climate-Smart Digital Agriculture Technologies for Livelihood Improvement of the Farming Communities"	1	ON	34	1	35	16	1	17	1	0	1	51	2	53
	PF & PFW	1/13/2023 To 1/13/2023	Exposure Visit cum training programme of farmers of Basirhat-II Block, ATMA on Crop Diversification in Birbhum District.	1	ON	18	0	18	1	0	1	1	0	1	20	0	20
	PF & PFW	3/18/2023 To 3/18/2023	Training Programme on Cultivation of Millets on Celebration of International Millet Conference	1	ON	17	15	32	4	15	19	4	5	9	25	35	60
	PF & PFW	3/24/2023 To 3/24/2023	Training and Awareness Programme on Nutri Garden and Millet Cultivation	1	OFF	22	2	24	34	2	36	0	0	0	56	4	60
	PF & PFW	3/29/2023 To 3/29/2023	Training Programme on Modern Agricultural Produces for increasing farm income	1	ON	29	2	31	16	1	17	5	0	5	50	3	53
	PF & PFW	6/19/2023 To 6/19/2023	Direct Seed Technologies of Rice.	1	ON	5	14	19	7	11	18	0	8	8	12	33	45
	PF & PFW	6/19/2023 To 6/22/2023	Direct seeding technologies of Rice	4	ON	44	0	44	6	5	11	1	0	1	51	5	56
	PF & PFW	6/20/2023 To 6/20/2023	Direct Seed Technologies of Rice.	1	ON	1	3	4	4	11	15	0	0	0	5	14	19
	PF & PFW	7/4/2023 To 7/4/2023	Training programme on Ornamental Fish Rearing	1	ON	0	0	0	0	0	0	14	16	30	14	16	30
	PF & PFW	7/14/2023 To 7/16/2023	Training Programme on Layout and Plantation of Citrus Orchard	3	ON	4	1	5	9	11	20	5	0	5	18	12	30
	PF & PFW	7/24/2023 To 7/25/2023	Specific Agro-Technology for cultivation of Ekangi rainfed mono-cropped situation	2	OFF	0	4	4	0	0	0	0	52	52	0	56	56
	EF	8/11/2023 To 8/11/2023	In-Service Training Programme on Improved Cultivation Practices of Different Millets	1	ON	25	3	28	9	0	9	0	0	0	34	3	37
	PF & PFW	8/23/2023 To 8/23/2023	Training Programme on Seed Production of Different Crops including Millets	1	ON	25	8	33	5	0	5	3	0	3	33	8	41
	PF & PFW	9/1/2023 To 9/1/2023	Training Programme on Sowing and Fertilizer Management of Kharif Pulses, Crop: Blackgram	1	ON	15	5	20	1	3	4	3	0	3	19	8	27
	PF & PFW	9/14/2023 To 9/14/2023	Framers Awareness Programme on Agromet Advisory Bulletin, District Agromet Unit (DAMU)	1	OFF	3	0	3	7	0	7	15	30	45	25	30	55
	PF & PFW	10/11/2023 To 10/11/2023	Training programme on improved Agro-Technology of different Fodder Production	1	ON	3	11	14	6	47	53	0	7	7	9	65	74
	PF & PFW	11/3/2023 To 11/3/2023	Quality Fodder Production and Seed Production Technologies	1	ON	25	5	30	2	5	7	5	0	5	32	10	42
	PF & PFW	11/23/2023 To 11/23/2023	Capacity Building Training Programme on ICAR-IIHR Technologies for SC and ST Farmers of Birbhum District	1	ON	0	0	0	17	17	34	19	26	45	36	43	79
	PF & PFW	11/24/2023 To 11/24/2023	Sowing and Fertilizer Management of Lentil Var. L-4717	1	ON	11	1	12	4	8	12	0	1	1	15	10	25
	PF & PFW	12/5/2023 To 12/5/2023	Role of Natural Farming for Better Management of Soil Health	1	ON	13	2	15	0	0	0	0	0	0	13	2	15
	PF & PFW	12/5/2023 To 12/5/2023	Training, demonstration and awareness on soil health management	1	ON	23	3	26	8	3	11	3	0	3	34	6	40

	RY	12/5/2023 To 12/5/2023	Training for School Children	1	ON	24	15	39	3	4	7	0	1	1	27	20	47
	RY	12/5/2023 To 12/9/2023	Production of Organic Inputs and Soil Testing	5	ON	13	2	15	0	0	0	0	0	0	13	2	15
	PF & PFW	12/14/2023 To 12/14/2023	Training on Sowing and Fertilizer Application in Wheat Var. HD-2967	1	ON	7	0	7	1	1	2	0	0	0	8	1	9
	Total					**361**	**97**	**458**	**160**	**145**	**305**	**79**	**146**	**225**	**600**	**388**	**988**

Discipline	Clientele	Date (mm/dd/yyyy)	Title of the training programme	Duration in days	Venue (Off/On Campus)	No. of Participants									Grand Total		
						Other			SC			ST					
						M	F	T	M	F	T	M	F	T	M	F	T
Agricultural Meteorology	PF & PFW	10/16/2023 To 10/16/2023	OFT Training on Coloured Cauliflower	1	ON	3	0	3	4	0	4	0	0	0	7	0	7
	PF & PFW	12/6/2023 To 12/6/2023	Farmers awareness programme on agromet advisory services and DAMU	1	OFF	13	23	36	4	0	4	0	0	0	17	23	40
	PF & PFW	12/7/2023 To 12/7/2023	Farmers awareness programme on Agromet Advisory Services	1	OFF	0	0	0	0	0	0	21	19	40	21	19	40
	PF & PFW	12/9/2023 To 12/9/2023	Training and Awareness Programme on Agro Forestry: Prospects in Birbhum District	1	ON	1	3	4	6	16	22	2	3	5	9	22	31
	PF & PFW	12/14/2023 To 12/14/2023	Farmers Awareness Programme on Agromet Advisory Services and District Agromet Unit (DAMU)	1	OFF	0	0	0	36	4	40	0	0	0	36	4	40
	Total					**17**	**26**	**43**	**50**	**20**	**70**	**23**	**22**	**45**	**90**	**68**	**158**

Discipline	Clientele	Date (mm/dd/yyyy)	Title of the training programme	Duration in days	Venue (Off/On Campus)	No. of Participants									Grand Total		
						Other			SC			ST					
						M	F	T	M	F	T	M	F	T	M	F	T
Plant Protection	PF	3/29/2023 To 3/29/2023	Training programme on vermicomposting and mushroom cultivation for sustainable agricultural development	1	ON	10	0	10	10	0	10	0	0	0	20	0	20
	PF	7/1/2023 To 7/1/2023	FLD training on Paddy seed treatment through *Trichoderma viride* as bio-agent.	1	ON	7	0	7	15	0	15	8	0	8	30	0	30
	RY	9/20/2023 To 9/26/2023	Beekeeping (STRY Programme)	7	ON	12	0	12	2	0	2	1	0	1	15	0	15
	Total					**29**	**0**	**29**	**27**	**0**	**27**	**9**	**0**	**9**	**65**	**0**	**65**

Discipline	Clientele	Date (mm/dd/yyyy)	Title of the training programme	Duration in days	Venue (Off/On Campus)	No. of Participants									Grand Total		
						Other			SC			ST					
						M	F	T	M	F	T	M	F	T	M	F	T
Animal Science	PF & PFW	1/9/2023 To 1/9/2023	Role of Animal Husbandry in Integrated Fish Farming	1	OFF	0	12	12	0	32	32	0	15	15	0	59	59
	RY	1/19/2023 To 2/1/2023	Commercial Broiler and Layer Farming	8	ON	4	1	5	0	6	6	4	2	6	8	9	17
	RY	2/4/2023 To 2/16/2023	Commercial Broiler and Layer Farming	8	ON	7	0	7	1	0	1	0	0	0	8	0	8
	PF & PFW	2/27/2023 To 2/27/2023	Identification and Improvement of Lower Conception Rate of Bovine	1	OFF	20	10	30	10	10	20	0	0	0	30	20	50
	PF & PFW	2/28/2023 To 2/28/2023	Farmers - Scientists Meet on Mastitis Management in Dairy Animal	1	ONLINE	29	0	29	8	1	9	2	0	2	39	1	40
	PF & PFW	3/27/2023 To 3/27/2023	Training programme on low-cost feed preparation for better production performance of livestock	1	OFF	4	0	4	21	25	46	0	0	0	25	25	50
	PF & PFW	4/6/2023 To 4/6/2023	Identification and Control of diseases in poultry and their prophylactic measures	2	OFF	0	3	3	0	36	36	0	2	2	0	41	41
	PF & PFW	5/26/2023 To 5/29/2023	Establishment of Small-Scale Dairy Unit	4	OFF	9	0	9	21	0	21	0	0	0	30	0	30
	PF & PFW	6/1/2023 To 6/1/2023	Celebration of World Milk Day	1	OFF	22	19	41	3	0	3	0	0	0	25	19	44
	PFW	6/22/2023 To 6/23/2023	Commercial Poultry Production for Enhanced Income	2	ON	0	28	28	0	2	2	0	0	0	0	30	30
	PF & PFW	7/20/2023 To 7/20/2023	Scientific Piggery Management for Improved Livelihood	1	ON	1	0	1	0	0	0	1	27	28	2	27	29
	PF & PFW	7/24/2023 To 7/24/2023	Scientific Piggery Management	1	OFF	1	0	1	0	0	0	1	28	29	2	28	30
	RY	7/28/2023 To 8/11/2023	Scientific Goatery Management	12	ON	7	0	7	2	0	2	3	0	3	12	0	12
	PF & PFW	8/21/2023 To 8/23/2023	Scientific Pig Farming	3	ON	0	0	0	0	0	0	7	1	8	7	1	8
	PF & PFW	8/24/2023 To 8/25/2023	Backyard Poultry Rearing to Enhance Income	2	ON	0	0	0	0	27	27	0	0	0	0	27	27
	RY	9/3/2023 To 9/9/2023	Goat rearing and management (STRY Programme)	5	ON	0	1	1	6	8	14	0	0	0	6	9	15
	RY	10/9/2023 To 10/13/2023	05 Days Training Programme of Lead Farmers of Goat Husbandry Oriented Clusters organized by Dept. of Animal Resource Development, Birbhum, Govt. of W. B. in collaboration with Rathindra Krishi Vigyan Kendra, PSB, Visva-Bharati, Sriniketan, Birbhum	5	ON	9	6	15	27	8	35	5	4	9	41	18	59
	PF & PFW	10/16/2023 To 10/16/2023	Training Programme on Zoonotic Diseases and Public Health	1	OFF	9	29	38	3	5	8	2	6	8	14	40	54
	PF & PFW	11/2/2023 To 11/2/2023	Commercial Duck Rearing both for Meat and Egg Purpose	1	OFF	0	0	0	0	0	0	6	34	40	6	34	40
	PF & PFW	11/7/2023 To 11/8/2023	Identification and Control of Diseases in Dairy Animal with their Prophylactic Measures	2	ON	0	0	0	0	0	0	4	30	34	4	30	34
	RY	11/24/2023 To 12/6/2023	Commercial Broiler and Layer Production	7	ON	0	0	0	0	10	10	0	0	0	0	10	10
	PF & PFW	12/15/2023 To 12/15/2023	Improvement of Sheep Farming for Enhanced Income Generation	1	OFF	1	7	8	8	14	22	0	1	1	9	22	31
	Total					**123**	**116**	**239**	**110**	**184**	**294**	**35**	**150**	**185**	**268**	**450**	**718**

Classes Under DAESI Course

Discipline	Clientele	Date (mm/dd/yyyy)	Title of the training programme	Duration in days	Venue (Off/On Campus)	No. of Participants									Grand Total		
						Other			SC			ST					
						M	F	T	M	F	T	M	F	T	M	F	T
DAESI	EF	1/2/2023 To 1/2/2023	Pests of potato and their management practices.	1	ON	26	2	28	2	0	2	0	0	0	28	2	30
	EF	1/2/2023 To 1/2/2023	Practical- Different propagation techniques in horticultural crops.	1	ON	26	2	28	2	0	2	0	0	0	28	2	30
	EF	1/3/2023 To 1/3/2023	Pests of potato and their management practices.	1	ON	28	2	30	4	0	4	0	0	0	32	2	34
	EF	1/3/2023 To 1/3/2023	Practical - Different propagation techniques in horticultural crops.	1	ON	28	2	30	4	0	4	0	0	0	32	2	34
	EF	1/9/2023 To 1/9/2023	Pests and diseases of solanaceous vegetables and their management.	1	ON	33	2	35	5	0	5	0	0	0	38	2	40
	EF	1/9/2023 To 1/9/2023	Different ongoing schemes in agriculture for farmers.	1	ON	33	2	35	5	0	5	0	0	0	38	2	40
	EF	1/10/2023 To 1/10/2023	Different ongoing schemes in agriculture for farmers.	1	ON	29	2	31	4	0	4	0	0	0	33	2	35
	EF	1/10/2023 To 1/10/2023	Pests and diseases of solanaceous vegetables and their management.	1	ON	29	2	31	4	0	4	0	0	0	33	2	35
	EF	1/16/2023 To 1/16/2023	Use of Agri Drone in agricultural field as agricultural mechanization.	1	ON	32	2	34	4	0	4	0	0	0	36	2	38
	EF	1/16/2023 To 1/16/2023	Irrigation scheduling and critical stages of crop for irrigation.	1	ON	32	2	34	4	0	4	0	0	0	36	2	38
	EF	1/17/2023 To 1/17/2023	Use of Agri Drone in agricultural field as agricultural mechanization.	1	ON	32	2	34	4	0	4	0	0	0	36	2	38
	EF	1/17/2023 To 1/17/2023	Irrigation scheduling and critical stages of crop for irrigation.	1	ON	32	2	34	4	0	4	0	0	0	36	2	38
	EF	1/23/2023 To 1/23/2023	Production technology of medicinal & aromatic plants.	1	ON	32	2	34	5	0	5	0	0	0	37	2	39
	EF	1/24/2023 To 1/24/2023	Production technology of medicinal & aromatic plants.	1	ON	33	2	35	4	0	4	0	0	0	37	2	39
	EF	1/30/2023 To 1/30/2023	Diseases and pests of cereal crops	1	ON	27	1	28	4	0	4	0	0	0	31	1	32
	EF	1/30/2023 To 1/30/2023	Diseases & pests of winter vegetables and their management.	1	ON	28	1	29	4	0	4	0	0	0	32	1	33
	EF	1/31/2023 To 1/31/2023	Diseases and pests of cereal crops	1	ON	28	2	30	4	0	4	0	0	0	32	2	34
	EF	1/31/2023 To 1/31/2023	Diseases & pests of winter vegetables and their management.	1	ON	28	2	30	4	0	4	0	0	0	32	2	34
	EF	2/6/2023 To 2/6/2023	Practical- Intercultural operation in chickpea field	1	ON	35	0	35	4	0	4	0	0	0	39	0	39
	EF	2/6/2023 To 2/6/2023	Introduction to Agro meteorology.	1	ON	35	0	35	4	0	4	0	0	0	39	0	39
	EF	2/7/2023 To 2/7/2023	Introduction to Agro meteorology.	1	ON	35	0	35	4	0	4	0	0	0	39	0	39

EF	2/7/2023 To 2/7/2023	Practical- Intercultural operation in chickpea field	1	ON	36	2	38	1	0	1	0	0	0	37	2	39
EF	2/27/2023 To 2/27/2023	Practical- Identification of medicinal & aromatic plants.	1	ON	35	0	35	4	0	4	0	0	0	39	0	39
EF	2/27/2023 To 2/27/2023	Remote sensing and various meteorological instruments and their uses.	1	ON	35	0	35	4	0	4	0	0	0	39	0	39
EF	2/28/2023 To 2/28/2023	Remote sensing and various meteorological instruments and their uses.	1	ON	34	2	36	1	0	1	0	0	0	35	2	37
EF	2/28/2023 To 2/28/2023	Practical- Identification of medicinal & aromatic plants.	1	ON	34	2	36	1	0	1	0	0	0	35	2	37
EF	3/6/2023 To 3/6/2023	Exposure Visit to Garden Section, Visva-Bharati.	1	OFF	36	0	36	4	0	4	0	0	0	40	0	40
EF	3/6/2023 To 3/6/2023	Exposure Visit to Garden Section, Visva-Bharati.	1	OFF	35	2	37	1	0	1	0	0	0	36	2	38
EF	3/13/2023 To 3/13/2023	Basic principles of irrigation and quality of irrigation water.	1	ON	35	0	35	4	0	4	0	0	0	39	0	39
EF	3/13/2023 To 3/13/202	Pest: A brief idea and its classification.	1	ON	34	0	34	4	0	4	0	0	0	38	0	38
EF	3/14/2023 To 3/14/2023	Pest: A brief idea and its classification.	1	ON	35	2	37	1	0	1	0	0	0	36	2	38
EF	3/14/2023 To 3/14/2023	Basic principles of irrigation and quality of irrigation water.	1	ON	35	2	37	1	0	1	0	0	0	36	2	38
EF	3/20/2023 To 3/20/2023	Practical- Layout and preparation of plots for medicinal garden.	1	ON	35	0	35	3	0	3	0	0	0	38	0	38
EF	3/20/2023 To 3/20/2023	Production technology of summer green gram and black gram.	1	ON	35	0	35	3	0	3	0	0	0	38	0	38
EF	3/21/2023 To 3/21/2023	Production technology of summer green gram and black gram.	1	ON	36	2	38	1	0	1	0	0	0	37	2	39
EF	3/21/2023 To 3/21/2023	Practical- Layout and preparation of plots for medicinal garden.	1	ON	36	2	38	1	0	1	0	0	0	37	2	39
EF	3/27/2023 To 3/27/2023	Insect Morphology.	1	ON	36	0	36	4	0	4	0	0	0	40	0	40
EF	3/27/2023 To 3/27/2023	Integrated Pest Management-Idea and components.	1	ON	36	0	36	4	0	4	0	0	0	40	0	40
EF	3/28/2023 To 3/28/2023	Insect Morphology	1	ON	37	2	39	1	0	1	0	0	0	38	2	40
EF	3/28/2023 To 3/28/2023	Integrated Pest Management-Idea and components.	1	ON	37	2	39	1	0	1	0	0	0	38	2	40
EF	4/3/2023 To 4/3/2023	General idea about weeds and its classification.	1	ON	32	0	32	4	0	4	0	0	0	36	0	36
EF	4/3/2023 To 4/3/2023	Irrigation scheduling and critical stages of different crops for irrigation.	1	ON	32	0	32	4	0	4	0	0	0	36	0	36
EF	4/4/2023 To 4/4/2023	Irrigation scheduling and critical stages of different crops for irrigation.	1	ON	36	1	37	1	0	1	0	0	0	37	1	38
EF	4/4/2023 To 4/4/2023	General idea about weeds and its classification.	1	ON	35	1	36	1	0	1	0	0	0	36	1	37
EF	4/10/2023 To 4/10/2023	Calculation of fertilizer requirement for different crops.	1	ON	34	0	34	4	0	4	0	0	0	38	0	38

EF	4/10/2023 To 4/10/2023	Practical demonstration of drip irrigation system.	1	ON	34	0	34	4	0	4	0	0	0	38	0	38
EF	4/11/2023 To 4/11/2023	Calculation of fertilizer requirement for different crops.	1	ON	37	2	39	1	0	1	0	0	0	38	2	40
EF	4/11/2023 To 4/11/2023	Practical demonstration of drip irrigation system.	1	ON	37	2	39	1	0	1	0	0	0	38	2	40
EF	4/17/2023 To 4/17/2023	Crop-specific weeds and their classification.	1	ON	33	0	33	3	0	3	0	0	0	36	0	36
EF	4/17/2023 To 4/17/2023	Production technology of millets.	1	ON	33	0	33	3	0	3	0	0	0	36	0	36
EF	4/18/2023 To 4/18/2023	Production technology of millets.	1	ON	32	2	34	1	0	1	0	0	0	33	2	35
EF	4/18/2023 To 4/18/2023	Crop-specific weeds and their classification.	1	ON	32	2	34	1	0	1	0	0	0	33	2	35
EF	4/24/2023 To 4/24/2023	Packages and practices of cultivation of Mango.	1	ON	33	0	33	4	0	4	0	0	0	37	0	37
EF	4/24/2023 To 4/24/2023	A Brief idea about Beekeeping.	1	ON	33	0	33	4	0	4	0	0	0	37	0	37
EF	4/25/2023 To 4/25/2023	A Brief idea about Beekeeping.	1	ON	35	2	37	1	0	1	0	0	0	36	2	38
EF	4/25/2023 To 4/25/2023	Packages and practices of cultivation of Mango.	1	ON	35	2	37	1	0	1	0	0	0	36	2	38
EF	5/1/2023 To 5/1/2023	Practical: Soil sample collection for soil testing	1	ON	36	0	36	4	0	4	0	0	0	40	0	40
EF	5/1/2023 To 5/1/2023	Safe use of pesticides.	1	ON	36	0	36	4	0	4	0	0	0	40	0	40
EF	5/2/2023 To 5/2/2023	Practical: Soil sample collection for soil testing	1	ON	36	2	38	1	0	1	0	0	0	37	2	39
EF	5/2/2023 To 5/2/2023	Safe use of pesticides.	1	ON	36	2	38	1	0	1	0	0	0	37	2	39
EF	5/8/2023 To 5/8/2023	Introduction to Soil Science and properties of soil.	1	ON	34	0	34	4	0	4	0	0	0	38	0	38
EF	5/8/2023 To 5/8/2023	Farm Mechanization and implements and their uses.	1	ON	34	0	34	4	0	4	0	0	0	38	0	38
EF	5/9/2023 To 5/9/2023	Farm Mechanization and implements and their uses.	1	ON	34	2	36	1	0	1	0	0	0	35	2	37
EF	5/9/2023 To 5/9/2023	Introduction to Soil Science and properties of soil.	1	ON	34	2	36	1	0	1	0	0	0	35	2	37
EF	5/15/2023 To 5/15/2023	Kisan Credit Card and crop insurance.	1	ON	32	0	32	4	0	4	0	0	0	36	0	36
EF	5/15/2023 To 5/15/2023	Physical and chemical properties of soil.	1	ON	32	0	32	4	0	4	0	0	0	36	0	36
EF	5/16/2023 To 5/16/2023	Kisan Credit Card and crop insurance.	1	ON	31	1	32	1	0	1	0	0	0	32	1	33
EF	5/16/2023 To 5/16/202	Physical and chemical properties of soil.	1	ON	31	1	32	1	0	1	0	0	0	32	1	33
EF	5/17/2023 To 5/17/2023	Exposure Visit to Meteorological Office, IMD, Sriniketan.	1	OFF	33	0	33	4	0	4	0	0	0	37	0	37
EF	5/17/2023 To 5/17/2023	Exposure Visit to Meteorological Office, IMD, Sriniketan.	1	OFF	36	2	38	1	0	1	0	0	0	37	2	39
EF	5/22/2023 To 5/22/2023	Production technology of Kharif vegetables.	1	ON	33	0	33	4	0	4	0	0	0	37	0	37
EF	5/22/2023 To 5/22/2023	Different ongoing schemes of agriculture for farmers.	1	ON	33	0	33	4	0	4	0	0	0	37	0	37

EF	5/23/2023 To 5/23/2023	Different ongoing schemes of agriculture for farmers.	1	ON	35	2	37	1	0	1	0	0	0	36	2	38
EF	5/23/2023 To 5/23/2023	Production technology of Kharif vegetables.	1	ON	35	2	37	1	0	1	0	0	0	36	2	38
EF	5/29/2023 To 5/29/2023	Production technology of Kharif vegetables.	1	ON	35	0	35	4	0	4	0	0	0	39	0	39
EF	5/29/2023 To 5/29/2023	Integrated Nutrient Management (INM).	1	ON	35	0	35	4	0	4	0	0	0	39	0	39
EF	5/30/2023 To 5/30/2023	Production technology of Kharif vegetables.	1	ON	36	1	37	1	0	1	0	0	0	37	1	38
EF	5/30/2023 To 5/30/2023	Integrated Nutrient Management (INM).	1	ON	36	1	37	1	0	1	0	0	0	37	1	38
EF	6/5/2023 To 6/5/2023	Seed Certification.	1	ON	35	0	35	3	0	3	0	0	0	38	0	38
EF	6/6/2023 To 6/6/2023	Seed Certification.	1	ON	36	2	38	1	0	1	0	0	0	37	2	39
EF	6/12/2023 To 6/12/2023	Problematic soils and their management.	1	ON	33	0	33	4	0	4	0	0	0	37	0	37
EF	6/12/2023 To 6/12/2023	Production technology of Vermicompost and multiplication of Azolla.	1	ON	34	0	34	4	0	4	0	0	0	38	0	38
EF	6/13/2023 To 6/13/2023	Production technology of Vermicompost and multiplication of Azolla.	1	ON	35	2	37	1	0	1	0	0	0	36	2	38
EF	6/13/2023 To 6/13/2023	Problematic soils and their management.	1	ON	35	2	37	1	0	1	0	0	0	36	2	38
EF	6/19/2023 To 6/19/2023	IPM of kharif vegetables.	1	ON	33	0	33	4	0	4	0	0	0	37	0	37
EF	6/20/2023 To 6/20/2023	IPM of kharif vegetables.	1	ON	35	2	37	1	0	1	0	0	0	36	2	38
EF	6/26/2023 To 6/26/2023	IPM of kharif rice.	1	ON	32	0	32	4	0	4	0	0	0	36	0	36
EF	6/26/2023 To 6/26/2023	Production and use of Biofertilizers.	1	ON	32	0	32	4	0	4	0	0	0	36	0	36
EF	6/27/2023 To 6/27/2023	IPM of kharif rice.	1	ON	33	2	35	1	0	1	0	0	0	34	2	36
EF	6/27/2023 To 6/27/2023	Production and use of Biofertilizers.	1	ON	33	2	35	1	0	1	0	0	0	34	2	36
EF	7/3/2023 To 7/3/2023	Brief idea about New-generation pesticides.	1	ON	29	0	29	3	0	3	0	0	0	32	0	32
EF	7/3/2023 To 7/3/2023	Improved cultivation practices of kharif rice.	1	ON	31	0	31	3	0	3	0	0	0	34	0	34
EF	7/4/2023 To 7/4/2023	Improved cultivation practices of kharif rice.	1	ON	36	2	38	1	0	1	0	0	0	37	2	39
EF	7/4/2023 To 7/4/2023	Brief idea about New-generation pesticides.	1	ON	33	2	35	1	0	1	0	0	0	34	2	36
EF	7/17/2023 To 7/17/2023	Practical- Identification of different weeds in Crop field.	1	ON	35	0	35	4	0	4	0	0	0	39	0	39
EF	7/18/2023 To 7/18/2023	Practical- Identification of different weeds in Crop field.	1	ON	34	2	36	1	0	1	0	0	0	35	2	37
EF	7/24/2023 To 7/24/2023	Numerical on Calculation of complex fertilizers for different crops	1	ON	34	0	34	3	0	3	0	0	0	37	0	37
EF	7/24/2023 To 7/24/2023	SRI Method of Rice Cultivation	1	ON	34	0	34	3	0	3	0	0	0	37	0	37
EF	7/25/2023 To 7/25/2023	Numerical on Calculation of complex fertilizers for different crops	1	ON	34	2	36	1	0	1	0	0	0	35	2	37
EF	7/25/2023 To 7/25/2023	SRI Method of Rice Cultivation	1	ON	34	2	36	1	0	1	0	0	0	35	2	37

EF	7/31/2023 To 7/31/2023	Weed problems and different herbicides.	1	ON	30	0	30	4	0	4	0	0	0	34	0	34
EF	7/31/2023 To 7/31/2023	Propagation techniques of different horticultural crops.	1	ON	33	0	33	4	0	4	0	0	0	37	0	37
EF	8/1/2023 To 8/1/2023	Propagation Techniques of different horticultural crops.	1	ON	36	2	38	1	0	1	0	0	0	37	2	39
EF	8/1/2023 To 8/1/2023	Weed problems and different herbicides.	1	ON	36	2	38	1	0	1	0	0	0	37	2	39
EF	8/7/2023 To 8/7/2023	Mode of action of herbicides, selectivity of herbicides and herbicide resistance.	1	ON	32	0	32	4	0	4	0	0	0	36	0	36
EF	8/7/2023 To 8/7/2023	Different instruments and equipment used in Soil Testing Laboratory for soil sample analysis & preparation of soil health card.	1	ON	32	0	32	4	0	4	0	0	0	36	0	36
EF	8/8/2023 To 8/8/2023	Mode of action of herbicides, selectivity of herbicides and herbicide resistance.	1	ON	32	2	34	1	0	1	0	0	0	33	2	35
EF	8/8/2023 To 8/8/2023	Different instruments and equipment used in Soil Testing Laboratory for soil sample analysis & preparation of soil health card.	1	ON	31	2	33	1	0	1	0	0	0	32	2	34
EF	8/14/2023 To 8/14/2023	Practical- Different propagation techniques of different horticultural crops.	1	ON	31	0	31	4	0	4	0	0	0	35	0	35
EF	8/14/2023 To 8/14/2023	Diseases of kharif rice and their management.	1	ON	31	0	31	4	0	4	0	0	0	35	0	35
EF	8/16/2023 To 8/16/2023	Practical- Different propagation techniques of different horticultural crops.	1	ON	33	2	35	1	0	1	0	0	0	34	2	36
EF	8/16/2023 To 8/16/2023	Diseases of kharif rice and their management.	1	ON	33	2	35	1	0	1	0	0	0	34	2	36
EF	8/21/2023 To 8/21/2023	Celebration of Parthenium Awareness Week.	1	ON	21	0	21	2	0	2	0	0	0	23	0	23
EF	8/21/2023 To 8/21/2023	Nutrient deficiency symptoms and their management.	1	ON	21	0	21	2	0	2	0	0	0	23	0	23
EF	8/22/2023 To 8/22/2023	Celebration of Parthenium Awareness Week.	1	ON	32	1	33	1	0	1	0	0	0	33	1	34
EF	8/22/2023 To 8/22/2023	Nutrient deficiency symptoms and their management.	1	ON	32	1	33	1	0	1	0	0	0	33	1	34
EF	8/28/2023 To 8/28/2023	Preparation and management of Nursery of vegetable crops.	1	ON	35	0	35	4	0	4	0	0	0	39	0	39
EF	8/28/2023 To 8/28/2023	Identification of pests and diseases of different fruit crops.	1	ON	35	0	35	4	0	4	0	0	0	39	0	39
EF	8/29/2023 To 8/29/2023	Identification of pests and diseases of different fruit crops.	1	ON	36	2	38	1	0	1	0	0	0	37	2	39
EF	8/29/2023 To 8/29/2023	Preparation and management of Nursery of vegetable crops	1	ON	36	2	38	1	0	1	0	0	0	37	2	39
EF	9/4/2023 To 9/4/2023	Production technology of Guava & Litchi.	1	ON	34	0	34	4	0	4	0	0	0	38	0	38
EF	9/4/2023 To 9/4/2023	Practical- Multiplication of Azolla.	1	ON	34	0	34	4	0	4	0	0	0	38	0	38

EF	9/5/2023 To 9/5/2023	Practical- Multiplication of Azolla.	1	ON	37	2	39	1	0	1	0	0	0	38	2	40
EF	9/5/2023 To 9/5/2023	Production technology of Guava & Litchi.	1	ON	37	2	39	1	0	1	0	0	0	38	2	40
EF	9/11/2023 To 9/11/2023	Practical- Identification of different insect-pests, diseases and weeds in rice field	1	ON	35	0	35	4	0	4	0	0	0	39	0	39
EF	9/12/2023 To 9/12/2023	Practical- Identification of different insect-pests, diseases and weeds in rice field.	1	ON	35	2	37	0	0	0	0	0	0	35	2	37
EF	9/19/2023 To 9/19/2023	Diseases and insect-pests of maize and their management practices.	1	ON	36	2	38	1	0	1	0	0	0	37	2	39
EF	9/19/2023 To 9/19/2023	Production technology of kharif maize.	1	ON	32	0	32	4	0	4	0	0	0	36	0	36
EF	9/20/2023 To 9/20/2023	Production technology of kharif maize.	1	ON	32	0	32	4	0	4	0	0	0	36	0	36
EF	9/20/2023 To 9/20/2023	Diseases and insect-pests of maize and their management practices.	1	ON	32	0	32	4	0	4	0	0	0	36	0	36
EF	9/25/2023 To 9/25/2023	Improved cultivation techniques of Lentil & Chickpea.	1	ON	32	0	32	4	0	4	0	0	0	36	0	36
EF	9/25/2023 To 9/25/2023	Practical- Production technology of Vermicompost.	1	ON	32	0	32	4	0	4	0	0	0	36	0	36
EF	9/26/2023 To 9/26/2023	Improved cultivation techniques of lentil & Chickpea.	1	ON	30	2	32	1	0	1	0	0	0	31	2	33
EF	9/26/2023 To 9/26/2023	Demonstration of Agri-Drone for spraying in paddy field.	1	ON	31	2	33	1	0	1	0	0	0	32	2	34
EF	10/3/2023 To 10/3/2023	Production technology of Mustard & Rapeseed	1	ON	36	2	38	1	0	1	0	0	0	37	2	39
EF	10/3/2023 To 10/3/2023	Major flagship schemes of Central/State Govt. related to development in agriculture.	1	ON	36	2	38	1	0	1	0	0	0	37	2	39
EF	10/4/2023 To 10/4/2023	Production technology of Mustard & Rapeseed.	1	ON	33	0	33	2	0	2	0	0	0	35	0	35
EF	10/4/2023 To 10/4/2023	Major flagship schemes of Central/State Govt. related to development in agriculture.	1	ON	33	0	33	2	0	2	0	0	0	35	0	35
EF	10/9/2023 To 10/9/2023	Exposure Visit to Sericulture Composite Unit, Sriniketan, Birbhum	1	OFF	32	0	32	4	0	4	0	0	0	36	0	36
EF	10/11/2023 To 10/11/2023	Exposure Visit to Sericulture Composite Unit, Sriniketan, Birbhum	1	OFF	37	2	39	1	0	1	0	0	0	38	2	40
EF	10/16/2023 To 10/16/2023	A brief idea about Hydroponics and its application	1	ON	34	0	34	3	0	3	0	0	0	37	0	37
EF	10/16/2023 To 10/16/2023	Practical- Preparation of Vermicompost.	1	ON	34	0	34	3	0	3	0	0	0	37	0	37
EF	10/16/2023 To 10/16/2023	Practical- Preparation of Vermicompost.	1	ON	35	2	37	1	0	1	0	0	0	36	2	38
EF	10/16/2023 To 10/16/2023	A brief idea about Hydroponics and its application	1	ON	36	2	38	1	0	1	0	0	0	37	2	39
EF	10/17/2023 To 10/17/2023	Safe and judicious use of Glyphosate.	1	ON	21	0	21	2	0	2	0	0	0	23	0	23
EF	10/17/2023 To 10/17/2023	Conservation Agriculture.	1	ON	21	0	21	2	0	2	0	0	0	23	0	23
EF	10/17/2023 To 10/17/2023	Conservation Agriculture.	1	ON	34	1	35	1	0	1	0	0	0	35	1	36
EF	10/17/2023 To 10/17/2023	Safe and judicious use of Glyphosate.	1	ON	32	1	33	1	0	1	0	0	0	33	1	34
EF	10/18/2023 To 10/18/2023	Exposure Visit to School of Agriculture, Seacom Skills University, Birbhum.	1	OFF	32	0	32	4	0	4	0	0	0	36	0	36

EF	10/18/2023 To 10/18/2023	Exposure Visit to School of Agriculture, Seacom Skills University, Birbhum.	1	OFF	36	1	37	1	0	1	0	0	0	37	1	38
EF	10/30/2023 To 10/30/2023	IPM of Rapeseed and Mustard.	1	ON	31	0	31	4	0	4	0	0	0	35	0	35
EF	10/31/2023 To 10/31/2023	IPM of Rapeseed and Mustard.	1	ON	37	2	39	1	0	1	0	0	0	38	2	40
EF	11/6/2023 To 11/6/2023	Cultivation practices of Potato.	1	ON	29	0	29	4	0	4	0	0	0	33	0	33
EF	11/6/2023 To 11/6/2023	Integrated Pest Management of Potato.	1	ON	29	0	29	4	0	4	0	0	0	33	0	33
EF	11/7/2023 To 11/7/2023	Cultivation practices of Potato.	1	ON	35	2	37	1	0	1	0	0	0	36	2	38
EF	11/7/2023 To 11/7/2023	Integrated Pest Management of Potato.	1	ON	34	2	36	1	0	1	0	0	0	35	2	37
EF	11/20/2023 To 11/20/2023	Production technology of Rabi vegetables.	1	ON	35	0	35	4	0	4	0	0	0	39	0	39
EF	11/20/2023 To 11/20/2023	Integrated Pest Management of Rabi vegetables.	1	ON	34	0	34	4	0	4	0	0	0	38	0	38
EF	11/21/2023 To 11/21/2023	Production technology of Rabi vegetables.	1	ON	36	2	38	1	0	1	0	0	0	37	2	39
EF	11/21/2023 To 11/21/2023	Demonstration of spotting of different items.	1	ON	36	2	38	1	0	1	0	0	0	37	2	39
EF	11/24/2023 To 11/24/2023	Exposure Visit to Regional Research Station, Bidhan Chandra Krishi Vishwavidyalaya, Sekhampur, Birbhum.	1	OFF	34	0	34	3	0	3	0	0	0	37	0	37
EF	11/24/2023 To 11/24/2023	Exposure Visit to Regional Research Station, Bidhan Chandra Krishi Vishwavidyalaya, Sekhampur, Birbhum.	1	OFF	37	2	39	1	0	1	0	0	0	38	2	40
EF	11/25/2023 To 11/25/2023	Exposure Visit to District Seed Farm, Kanksa, Paschim Bardhaman.	1	OFF	35	0	35	4	0	4	0	0	0	39	0	39
EF	11/25/2023 To 11/25/2023	Exposure Visit to District Seed Farm, Kanksa, Paschim Bardhaman.	1	OFF	37	2	39	1	0	1	0	0	0	38	2	40
EF	11/27/2023 To 11/27/2023	Production technology of Banana and Citrus.	1	ON	35	0	35	4	0	4	0	0	0	39	0	39
EF	11/28/2023 To 11/28/2023	Production technology of Banana and Citrus.	1	ON	33	2	35	1	0	1	0	0	0	34	2	36
EF	12/4/2023 To 12/4/2023	Revision and recapitulation of syllabus.	1	ON	35	0	35	4	0	4	0	0	0	39	0	39
EF	12/4/2023 To 12/4/2023	Suggestions for final exam and records submission.	1	ON	35	0	35	4	0	4	0	0	0	39	0	39
EF	12/5/2023 To 12/5/2023	Revision and recapitulation of syllabus.	1	ON	34	2	36	1	0	1	0	0	0	35	2	37
EF	12/5/2023 To 12/5/2023	Suggestions for final exam and records submission.	1	ON	34	2	36	1	0	1	0	0	0	35	2	37
EF	12/18/2023 To 12/18/2023	Orientation and introductory session.	1	ON	32	3	35	2	0	2	1	0	1	35	3	38
EF	12/18/2023 To 12/18/2023	Discussion of course module and different records to be maintained.	1	ON	32	3	35	2	0	2	1	0	1	35	3	38
EF	12/19/2023 To 12/19/2023	Orientation and introductory session.	1	ON	28	4	32	6	0	6	0	0	0	34	4	38
EF	12/19/2023 To 12/19/2023	Discussion of course module and different records to be maintained.	1	ON	28	4	32	6	0	6	0	0	0	34	4	38
Total					**5783**	**185**	**5968**	**448**	**0**	**448**	**2**	**0**	**2**	**6233**	**185**	**6418**